Draft
Environmental Impact Report

SCH# 2022100646

Volume 3

Appendices F through J-2

MOJAVE MICRO MILL PROJECT

by PSGM3 Holdings Corp (Pacific Steel Group) *(PP22402)*

General Plan Amendment No.3, Map No. 213
Zone Change Case No. 62, Map No. 213
Conditional Use Permit No. 71, Map No. 213
Conditional Use Permit No. 72, Map No. 213
Approval of Precise Development Plan No. 3, Map No. 213
Approval of Zone Variance No. 24, Map. No. 213
Approval of Zone Variance No. 25, Map No. 213

Kern County
Planning and Natural Resources Department
Bakersfield, California

November 2023

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Kern County
Planning and Natural Resources Department
Bakersfield, California

Technical Assistance by:
Kimley-Horn

November 2023

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Appendices – Volume 3

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Appendix F: Cultural Resources Assessment Report

Appendix G-1: Greenhouse Gas and Energy Technical Report

Appendix G-2: Greenhouse Gas and Energy Analysis of Off-Site Power Utilities

Appendix H: Geotechnical Investigation Report

Appendix I: Paleontological Resources Assessment Report

Appendix J-1: Phase I Environmental Site Assessment Report

Appendix J-2: Limited Site Assessment

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Appendix F

Cultural Resources Assessment Report

Mojave Micro Mill Project, Kern County, California

Cultural Resources Assessment Report

Prepared for
Pacific Steel Group
4805 Murphy Canyon Road
San Diego, California 92123

September 2022



Mojave Micro Mill Project, Kern County, California

Cultural Resources Assessment Report

Prepared for:
Pacific Steel Group
4805 Murphy Canyon Road
San Diego, California 92123

September 2022

Prepared by:
ESA
626 Wilshire Blvd. Suite 1100
Los Angeles, CA 90017

Principal Investigator:
Monica Strauss, M.A., RPA

Report Authors:
Michael Vader, B.A.
Matheson Lowe, B.A.

Project Location:
Soledad Mountain (CA) USGS 7.5-minute Topographic Quad
Township 10 North, Range 12 West, Section 27

Acreage: Approx. 174 acres

Assessor Parcel Numbers: 431-010-02 and
431-030-02

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EXECUTIVE SUMMARY

Mojave Micro Mill Project - Cultural Resources Assessment Report

Environmental Science Associates (ESA) has been retained by the Pacific Steel Group (Applicant) to prepare a Phase I Cultural Resources Assessment for the Mojave Micro Mill Project (Project) in support of an Environmental Impact Report (EIR) being prepared pursuant to the California Environmental Quality Act (CEQA). Kern County is the lead agency pursuant to CEQA. The Project proposes to construction and operation of a micro mill facility and associated infrastructure necessary to produce reinforcing bar (rebar) from scrap metal (e.g., shredded automobiles, appliances, structural and sheet metal, and other pre-processed steel bundles) through various recycling processes.

A records search for the Project was conducted on March 29, 2021 at the California Historical Resources Information System (CHRIS) Southern San Joaquin Valley Information Center (SSJVIC) housed at California State University, Bakersfield. The records search included a review of all recorded cultural resources and previous studies within the Project area and a 0.5-mile radius of the Project area. The records search results indicate seven cultural resources studies have been conducted within a 0.5-mile radius of the Project area, three of which (KE-01028, -02323, and -02526) cover approximately 5 percent of the Project area. The records search results indicate that 105 cultural resources have been previously recorded within a 0.5-mile radius of the Project area including six prehistoric archaeological sites, 29 historic-period archaeological sites, three historic-period built resources, 10 prehistoric isolates, and 57 historic-period isolates. Of these 105 previously recorded resources, 23 are located in the vicinity of the Project area and include one prehistoric archaeological site (P-15-015942), 12 historic-period archaeological sites (P-15-008768, P-15-010171, -011740, -015933, -015934, -015935, -015936, -015937, -015938, -015939, -015940, and -015941), one historic-period built resource (P-15-002050), two prehistoric isolates (P-15-015947 and -015950), and seven historic-period isolates (P-15-015944, -015945, -015946, -015948, -015949, -015951, and -015952).

A Sacred Lands File (SLF) conducted by the California Native American Heritage Commission (NAHC) on April 7, 2021 indicated that Native American cultural resources are not known to be located within the Project area. The County will conduct consultation with appropriate tribes per requirements of Assembly Bill 52, and the results of this consultation will be summarized in the EIR.

Historic maps and aerial photographs were examined to provide information on historic land-use patterns in the project area. Available topographic maps include the 1915 and 1917 Elizabeth Lake 30-minute quadrangles, the 1943 and 1956 Rosamond 15-minute quadrangles, the 1947 and

1973 Soledad Mountain 7.5-minute quadrangles. Historic aerial imagery of the Project area was available for the years 1952, 1972, 1994, 2005, 2009, 2010, 2012, 2014, 2016 and 2018. In sum, the historic map and aerial review indicate very little development within the Project area during the 20th century aside from a single structure located in the Project area's northwestern corner on the 1917 topographic map, but no longer present on the 1943 map. Additional development within the Project area does not occur until 2017 when a scrap yard located within the Project area's northern boundary was established.

A desktop analysis was undertaken to assess the potential for subsurface archaeological resources within the Project area. Sources reviewed include geologic maps, soil maps, geologic reports, as well as the results of the SSJVIC records search and historic map and aerial review. The subsurface archaeological sensitivity review indicates Holocene-age Quaternary alluvial deposits are mapped at surface within the Project area. These deposits encompass the entirety of human occupation within the western Mojave Desert, and are, therefore, of suitable age to preserve subsurface archaeological deposits. The soil types present in the Project area are sandy in composition and are derived from alluvial processes that, overtime, may cover previously surficial archaeological resources. Further, the Project area and its vicinity appear to have seen a moderate degree of activity throughout the prehistoric period as indicated by the number of seasonal campsites and lithic scatters in the Project area's vicinity. Based on these variables, the Project area has a moderate to high sensitivity for the presence of subsurface archaeological resources.

A cultural resources survey was conducted on May 3-4, 2021. The survey was aimed at identifying surface evidence of archaeological materials and historic-period built features. Of the 23 cultural resources identified in the vicinity of the Project area as part of the SSJVIC records search, 10 (P-15-002050 [Southern Pacific Railroad], -008768 [refuse scatter], -011740 [refuse scatter], -015933 [refuse scatter], -015934 [refuse scatter], -015935 [refuse scatter], -015937 [refuse scatter and debitage], -15938 [refuse scatter and debitage], -015941 [refuse scatter], and -015942 [lithic scatter]) were relocated. The remaining 13 previously recorded cultural resources (P-15- 010171 [refuse scatter], -015936 [refuse scatter], -015939 [refuse scatter], -015940 [refuse scatter], -015944 [historic-period isolate], -015945 [historic-period isolate], -015946 [historic-period isolate], -015947 [prehistoric isolate], -015948 [historic-period isolate], -015949 [historic-period isolate], -015950 [prehistoric isolate], -015951 [historic-period isolate], -015952 [historic-period isolate]) identified by the records search could not be relocated. These 13 cultural resources (4 historic sites, 2 prehistoric isolates, 7 historic isolates), all of which are resource types surficial in nature, appear to have been destroyed by recent grading and mowing. In addition to the previously recorded resources, three newly recorded resources (ESA-MMM-Site-001H [refuse scatter], ESA-MMM-Site-002H [refuse scatter], and ESA-MMM-ISO-001P [prehistoric isolate]) were also identified as a result of the survey.

Of the 13 cultural resources identified (10 previously recorded and 3 newly recorded), one (P-15-015942) is a prehistoric archaeological site consisting of a lithic scatter. To determine the presence/absence of any subsurface archaeological deposits associated with the site, ESA archaeologists conducted an Extended Phase I Investigation (XP1 Investigation) at P-15-015942 on December 12, 2021. As part of the XP1 Investigation, 12 Hand Auger Bores (HABs) were

excavated within the site's mapped boundary to depths ranging from 20-40 centimeters below the ground surface. As a result of the XP1 Investigation, no subsurface deposit associated with the site was identified. Given the lack of a subsurface deposit, ESA recommends the site not eligible for listing in the California Register of Historical Resources under Criteria 1-4.

The cultural resources survey identified 13 cultural resources (10 previously recorded and 3 newly recorded) in the vicinity of the Project area. Twelve of these 13 resources are recommended not eligible for listing in the California Register and, therefore, do not qualify as historical resources. Nor do these resources qualify as unique archaeological resources under Public Resources Code 21803.2(g). One resource, P-15-002050 (Southern Pacific Railroad), is potentially eligible for listing in the California Register and, therefore, may qualify as a historical resource. However, this resource, located outside of the Project area, would not be subject to direct or indirect impacts as a result of Project implementation. Therefore, the Project would not result in significant impacts to known cultural resources that qualify as historical resources pursuant to CEQA.

Mojave Micro Mill Project

Cultural Resources Assessment Report

Introduction

Environmental Science Associates (ESA) has been retained by the Pacific Steel Group (Applicant) to prepare a Phase I Cultural Resources Assessment for the Mojave Micro Mill Project (Project) in support of an Environmental Impact Report (EIR) being prepared pursuant to the California Environmental Quality Act (CEQA). Kern County is the lead agency pursuant to CEQA. The Project proposes the construction and operation of a micro mill facility and associated infrastructure necessary to produce reinforcing bar (rebar) from scrap metal (e.g., shredded automobiles, appliances, structural and sheet metal, and other pre-processed steel bundles) through various recycling processes.

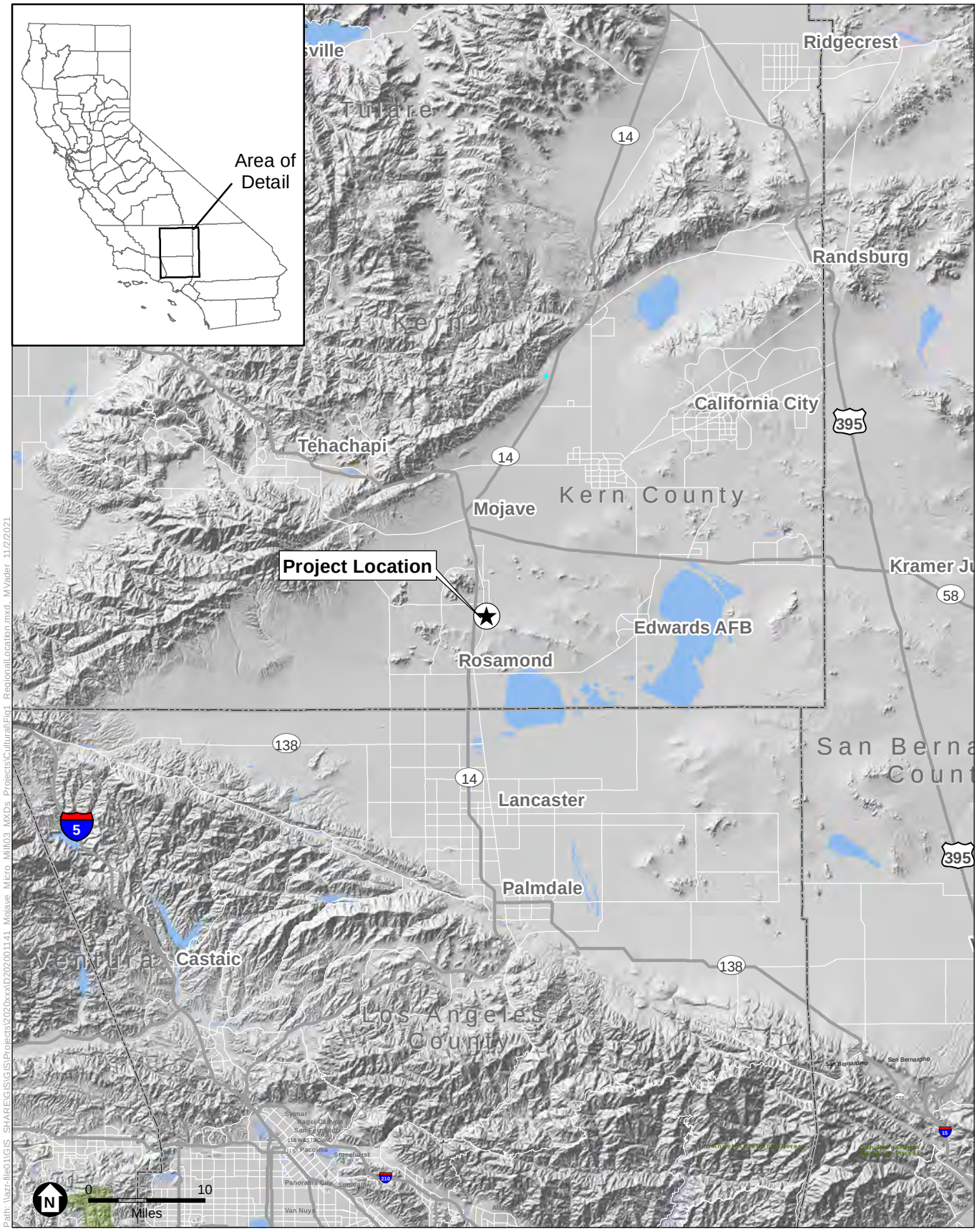
ESA personnel involved in the preparation of this report are as follows: Monica Strauss, M.A., RPA., Principal Investigator; Michael Vader, B.A., Field Director and report author; Salpi Bocchieriyan, M.A., RPA, report contributor and field archaeologist; Matheson Lowe, B.A, and Miranda Rodriguez, field archaeologists; and Jason Nielson, GIS specialist. Resumes of key personnel are included in **Appendix A**.

Project Location

The 174-acre Project area is located in the Mojave Desert in the southwest portion of Kern County, along Highway 14 equidistant between the communities of Mojave to the north and Rosamond to the south (**Figure 1**). The Project includes Assessor Parcel Numbers (APNs) 431-010-02 and 431-030-02 and is bounded by Sopp Road to the north, a segment of the Atchison Topeka and Santa Fe Railroad to the west, and Edwards Air Force Base to the east (**Figure 2**) and undeveloped land to the south. Specifically, the Project is located in Section 27 of Township 10 North, Range 12 West of the Soledad Mountain, CA 7.5-minute USGS topographic quadrangle (**Figure 3**).

Project Description

The Project proposes to construct and operate a micro mill facility and associated infrastructure necessary to produce rebar from scrap metal (e.g., shredded automobiles, appliances, structural and sheet metal, and other pre-processed steel bundles) through various recycling processes. Rebar is used in concrete to provide additional strength, as concrete is weak in tension, while steel is strong in both tension and compression. As rebar is used in all aspects of construction that require concrete, there is a high demand in California for rebar. However, as the last California rebar manufacturing facility in Rancho Cucamonga closed in 2020, there is need for an environmentally responsible, reliable, long-term method for disposing of junk cars and other iron and steel scrap and production of rebar in California.

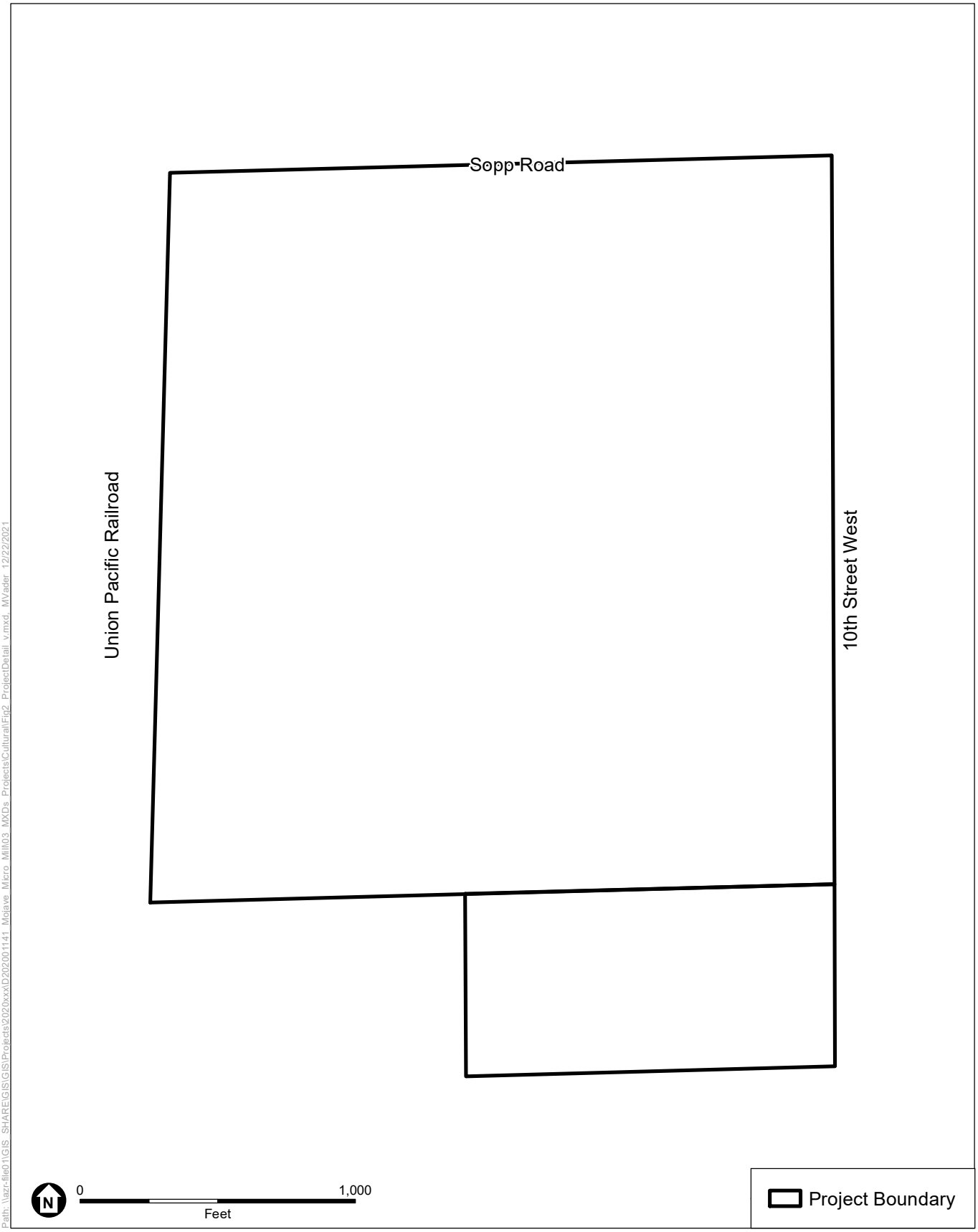


SOURCE: ESRI

Mojave Micro Mill Project

Figure 1
Regional Location

ESA

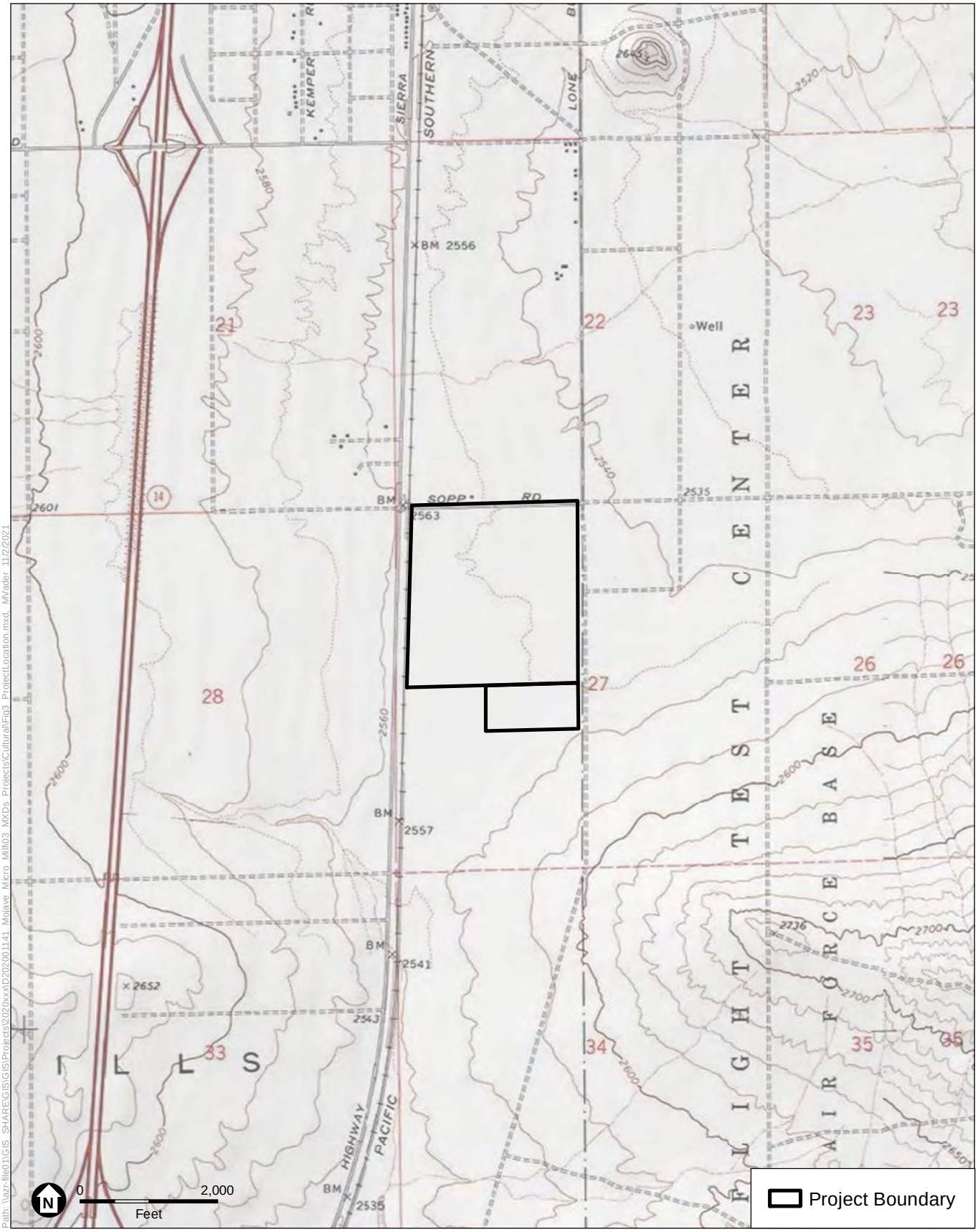


SOURCE: ESRI 2021

Mojave Micro Mill Project

Figure 2
Project Detail

ESA



SOURCE: SSJVIC, 2021

Mojave Micro Mill Project

Figure 3
Project Location

ESA

Project Components

The combined Project facilities are depicted in **Figure 4** and would include the following components:

Micro Mill Facility - The approximate 475,800 square-foot facility includes 13 connected and standalone buildings, as follows:

Raw Material Handling

- 34,500 square foot scrap bay (approximately 75 feet high) for metal scrap storage areas;

Melt Shop Process

- 14,700 square foot electric arc furnace (EAF)/ladle metallurgy station (LMS) bay (approximately 110 feet high) with 3 bridge cranes (76 feet high);
- 12,500 square foot caster bay (approximately 100 feet high) with a 76-foot bridge crane;
- 6,600 square foot melt shop (MS) Complex structure (38 feet heigh);
- 8,700 square foot ladle maintenance bay (approximately 38 feet high);

Rolling Mill Process

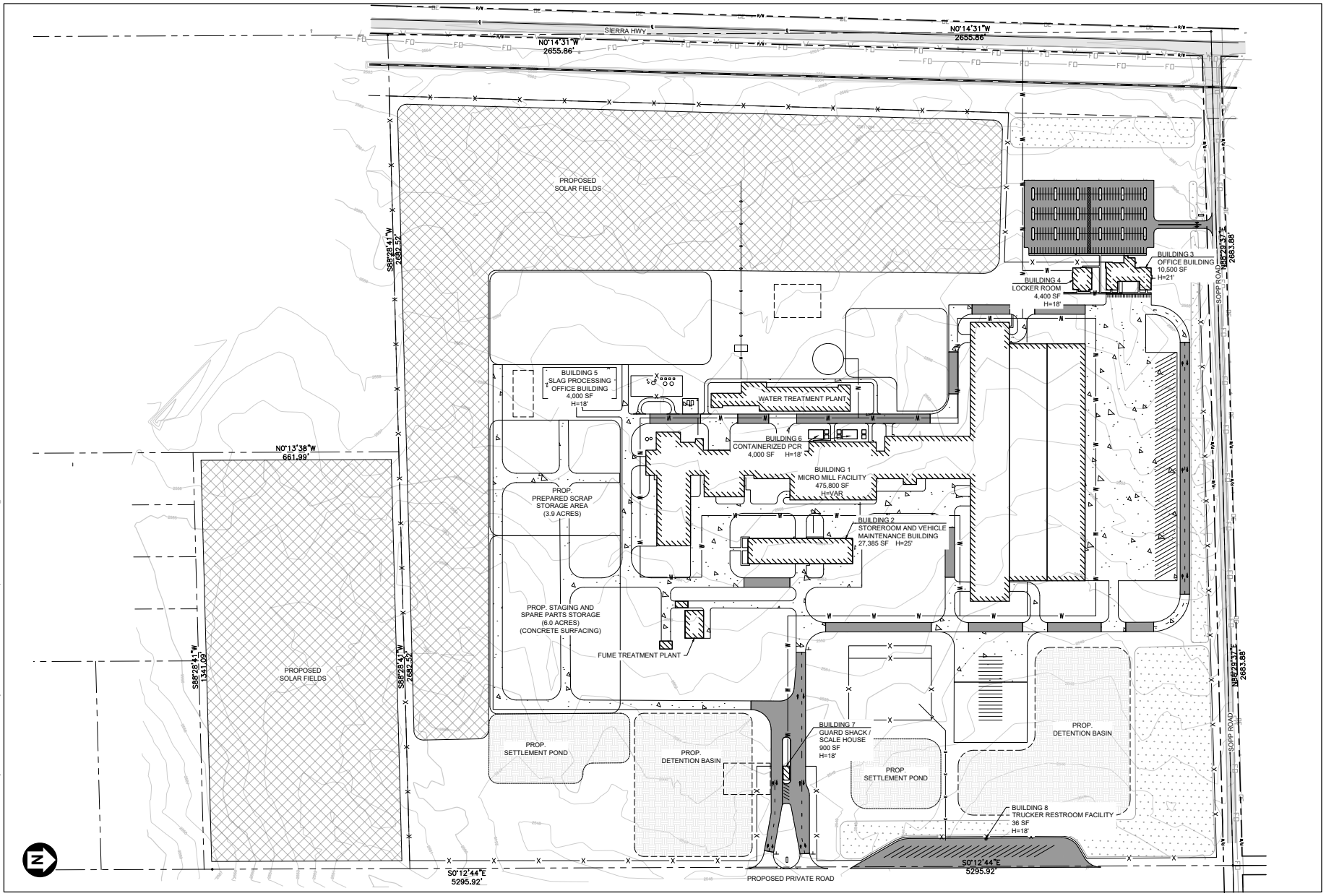
- 61,000 square foot rolling mill bay (approximately 50 feet high);
- 18,700 square foot roll shop (approximately 35 feet high);
- 6,100 square foot service bay (approximately 40 feet high);
- 12,100 square foot spooler bay (approximately 35 feet high);
- 118,100 square foot finished goods bay (approximately 50 feet high);
- 400 square foot test bay (approximately 22 feet high);

Fabrication Shop Process

- 91,200 square foot stock bay (approximately 50 feet high); and
- 91,200 square foot fabrication bay (approximately 45 feet high).

Ancillary Buildings – The micro mill facility would be supported by seven ancillary structures that would serve the operation of the micro mill facility, as follows:

- 27,385 square foot storeroom and vehicle maintenance building (approximately 25 feet high);
- 10,500 square foot office building (approximately 21 feet high);
- 4,400 square foot locker room (approximately 18 feet high);
- 4,000 square foot slag processing office building;
- 4,000 square foot Containerized Power Control Room (PCR);
- 900 square foot guard shack/scale house; and
- 36 square foot Trucker Restroom Facility.



2020/D2020011401.00 - Mojave Micro Mill Project - Pacific Steel/05 Graphics-GIS-Modeling/Illustrator

SOURCE: R.E. Warner, 2022

Mojave Micro Mill Project

Figure 4
Project Facilities

ESA

Additional Site Components – Other notable components of the project site are as follows:

- Approximately 63 acres of ground-mounted solar panels;
- Substation to support ground-mounted solar panels;
- Fume Treatment Plant (approximately 120 feet high);
- A water treatment plant that includes a settling basin, cooling towers, pump pads, and heat exchangers;
- Slag Processing Plant;
- Dolomite and lime silos (approximately 40 feet high);
- Staging and spare parts storage;
- Numerous AC power unit substations throughout the project area in order to power the various buildings;
- On-site access corridors;
- 7 foot high perimeter security fencing (6 foot high chain link fence with 1 foot high barbed wire);
- On-site parking area including approximately 246 auto parking spaces, 17 truck stalls, and 50 trailer stalls;
- Road improvements along Sopp Road and future private road south of Lone Butte Road Sopp Road corner;
- Landscaping; and
- New pavement, curb and gutter, and sidewalk.

Implementation of the proposed project includes the following requests:

- An amendment to the Land Use Element of the Kern County General Plan from Map Code 8.5 (Resource Management) to 7.3 (Heavy Industrial), or a more restrictive map code designation;
- A change in Zone Classification from A-1 (Limited Agriculture) to M-3 PD (Heavy Industrial - Precise Development Combining) District;
- A Precise Development Plan for conformity with the requested Zone Classification Change to M-3 PD.
- A Zone Variance for a reduction in the required number parking spaces from 993 spaces to 246 spaces.

Setting

Natural Setting

The Project area lies within the Western Mojave Desert, specifically the Antelope Valley. The Antelope Valley occurs within the Mojave Desert geomorphic province (CGS 2002). The Mojave Desert province is characterized primarily by a broad interior region of isolated mountain ranges separated by expanses of desert plains. The Mojave Desert province is wedged between the Garlock Fault and the San Andreas Fault, which have uplifted the surrounding mountains

relatively rapidly, isolating the Mojave Desert from the Pacific Coast and creating the interior drainage basins of the western Mojave Desert, such as the Antelope Valley. The west end of the Antelope Valley is defined by the Tehachapi and San Gabriel Mountains, forming the v-shaped basin of the western Mojave Desert.

The Antelope Valley floor is mantled in thick deposits of Quaternary alluvial and lacustral (lakebed) sediments that have filled the West Antelope, East Antelope and Kramer structural basins. The alluvial sediments are subdivided into two units: older (Pleistocene) Quaternary sediments, and younger (Holocene) alluvial surface deposits. These alluvial sediments are derived from nearby granitic mountains and have been deposited on the valley floor over the course of thousands of years.

Prehistoric Setting

The prehistory of the Mojave Desert is generally described in terms of cultural "complexes." A complex is a specific archaeological manifestation of a general mode of life, characterized by distinct technologies, artifact types, economic systems, trade and burial practices, and other aspects of culture. Complexes are typically associated with particular chronological periods. The prehistory of the Mojave is generally divided into the following time-periods/complexes: Paleo-Indian, Lake Mojave Complex, Pinto Complex, Gypsum Complex, Rose Springs Complex, and Late Prehistoric.

Paleo-Indian (10,000–8000 B.C.)

The Paleo-Indian period is represented in the Mojave primarily by large, fluted Clovis projectile points. This limited evidence suggests that early human occupants of the Mojave probably lived in small, mobile groups in temporary camps in the vicinity of permanent water sources (Sutton et al., 2007). In the vicinity of the Project area, a fragment of a fluted Clovis point was recorded on the southern slopes of the Tehachapi Mountains. In addition, the earliest occupation of CA-KER-2821/H, also known as the Bean Springs complex, an extensive archaeological site near Willow Springs, has been radiocarbon dated to 9,020-9,430 RCYBP (radiocarbon years before present) (Way 2009).

Lake Mojave Complex (8000–6000 B.C.)

In terms of material culture, the Lake Mojave Complex is typified by stone tools such as stemmed Lake Mojave and Silver Lake projectile points, bifaces, steep-edged unifaces, crescents, and some ground stone implements (Sutton et al. 2007). Lake Mojave groups were organized in relatively small, mobile groups and practiced a forager-like subsistence strategy. Some trade with coastal groups was practiced, as evidenced by the presence of shell beads. Lake Mojave sites have been found primarily around Fort Irwin, Lake Mojave, China Lake, Rosamond Lake, and Twentynine Palms.

The Pinto Complex (6000–3000 B.C.)

Archaeological deposits ascribed to the Pinto Complex suggest that Pinto settlement patterns consisted of seasonal occupation by small, semi-sedentary groups that were dependent upon a

combination of big and small-game hunting and collection strategies, which could include the exploitation of resources associated with streams or other water sources. Typically, sites of this period, which are far more geographically widespread than the Lake Mojave complex sites, are found along lakeshores and streams or springs, some of which are now dry. Material culture representative of this period in California prehistory includes roughly formed projectile points, "heavy-keeled" scrapers, choppers, and a greater prevalence of flat millingstones and manos, indicating more intensive use and processing of plant resources (Warren 1984; Sutton et al. 2007). At the end of the middle Holocene, around 3,000 B.C., environmental conditions became much drier and hotter, and few sites in the Mojave date to the period between 3000 and 2000 B.C., suggesting that the area's population may have decreased during this period of unfavorable climate (Sutton et al. 2007).

Gypsum Complex (c. 2000 B.C.–A.D. 200)

Many archaeological sites of this period are small and surficial, probably indicative of temporary occupation. It is during this time, however, that more archaeological evidence suggestive of inter-tribal trade appears, particularly between the desert and the coast. At a site at Lovejoy Springs (CA-LAN-192), which has a prominent Gypsum component, a group inhumation with at least nine individuals was uncovered, including a child buried with more than 3,000 *Olivella* shell beads from the southern Californian coast (Price et al. 2008). The artifact assemblage associated with this period also includes an increased number of millingstones and manos, and it is believed that it was during this period that the pestle and mortar were introduced. These technological developments may point to the increased consumption of seeds and mesquite. Other artifacts associated with the Gypsum Complex include Humboldt Concave Base, Gypsum Cave, Elko Eared, and Elko Corner-notched projectile points (Warren 1984).

Rose Springs Complex (c. A.D. 200–1200)

The general cultural pattern for this period is a continuation of that of the preceding Gypsum Complex. Rose Springs archaeological sites are more numerous than sites dating to previous periods and contain more well-developed middens, indicating an increase in population and a more permanent settlement pattern (Sutton et al. 2007). In addition, the archaeological record attests to established trade routes between desert and coastal populations, evidenced by shell beads and steatite, as well as an introduction of Anasazi influence from the eastern Great Plains as seen in the appearance of turquoise and pottery. Material culture related to this complex includes obsidian artifacts, Rose Spring and Eastgate projectile points, millingstones, manos, mortars and pestles, slate pendants, and incised stones (Warren 1984). These projectile points, which are smaller than those in preceding periods, are thought to reflect the adoption of the bow and arrow.

The prevalent use of obsidian is a defining feature of the Rose Springs period. Obsidian from the Coso volcanic field, approximately 70 miles north of Mojave, was imported in near-finished form for use in making lithic tools (Price et al. 2008). The importing of obsidian seems to have dropped sharply at the end of the Rose Springs period, possibly associated with the Medieval Climatic Anomaly, a period of climate change between A.D. 800 to 1350, and the concurrent migration of Numic-speaking populations out of southeastern California and into the Great Basin.

Several periods of drought affected the Mojave in the Rose Springs period, associated with the Medieval Climatic Anomaly, and subsequent Late Prehistoric Period. Drops in the lake levels at Mono Lake attest to dry periods in A.D. 900–1100 and A.D. 1200–1350 (Price et al. 2008).

Several major Rose Springs villages or site complexes exist in the vicinity of the Project area. A complex of 15 sites exists near Rosamond Lake, many of which are characterized solely by evidence of lithic reduction. Some of these sites have been dated to the Rose Springs Complex (Gardner 2009). A number of sites have been identified along the shores of Koehn Lake, including one site that retains evidence of a pit-house (Sutton 1996).

The Late Prehistoric Period (A.D. 1200–European Contact)

Following periods of drought during the Rose Springs Period, wetter conditions returned between A.D. 1350 and 1600, associated with a climatic event known as the Little Ice Age.

By the Late Prehistoric Period, an extensive network of established trade routes wound their way through the desert, routing goods to populations throughout the Mojave region. It is also believed that these trade routes encouraged or were the motivating factors for the development of an "increasingly complex socioeconomic and sociopolitical organization" among Protohistoric peoples in southern California. Housepit village sites are prevalent during this period, as are the presence of Desert Side-notched and Cottonwood projectile points, brownware and buffware ceramics, steatite shaft straighteners, painted millingstones, and, to a lesser degree, coastal shell beads. Beginning around A.D. 1300, however, a decline in trade occurred and well-established village sites were abandoned (Warren, 1984).

Ethnographic Setting

At the time of European contact, numerous groups occupied the area in and surrounding the Antelope Valley. The southeastern portion of the valley, around the Mojave River, was inhabited by the Serrano, who call themselves Maara'yam.. The Desert Serrano have sometimes also been referred to as the Vanyume. The territory of the Tataviam centered on the southwestern extent of the Antelope Valley, the Santa Clara River drainage, and possibly the Sierra Pelonas and the Palmdale area (Sutton 1988). The Kitanemuk inhabited the southern Tehachapi Mountains and the northern and central portion of the Antelope Valley. To the north, the Kawaiisu occupied the southern Sierra Nevada and the northern Tehachapi Mountains, and may have also inhabited part of the western Mojave Desert (Sutton 1988). Finally, during the historic period, there is some evidence for the occupation of the Western Mojave by the Chemehuevi.

The Serrano and Kitanemuk, the two groups that have the most well-documented association with the Project area, are described in more detail below.

Serrano

The Serrano occupied territories that ranged from low or moderately low desert to the mountain regions of the Transverse and Peninsular ranges. Serrano territory included the Antelope Valley in the west, extended to Twenty-Nine Palms in the east, beyond the San Bernardino Mountains to Yucaipa Valley in the south, and north across the western Mojave desert, along the Mojave River.

According to Kroeber (1925) Serrano territory may have extended at least 20 miles to the west of Mount San Antonio.

The Serrano were organized into clans, with the clan being the largest autonomous political entity. They lived in small villages where extended families lived in circular, dome-shaped structures (called Kiič) made of willow frames covered with tule thatching. Each clan had one or more principal villages in addition to numerous smaller villages associated with the principal village (Price et al. 2008).

Villages located at higher elevations were placed near canyons that received substantial precipitation or were adjacent to streams and springs. Villages situated at lower elevations were also located close to springs (which were considered sacred places for the Serrano), or in proximity to the termini of alluvial fans where the high-water table provided abundant mesquite and shallow wells could be dug.

The Serrano subsistence strategy relied upon hunting and gathering, and occasionally fishing. Villages divided into smaller, mobile gathering groups during certain seasons to gather seasonally available foods. The division of labor was split between women gathering and men hunting and fishing (Bean and Smith 1978; Warren 1984). Mountain sheep, deer, rabbits, acorns, grass seeds, piñon nuts, bulbs, yucca roots, cacti fruit, berries, and mesquite were some of the more common resources utilized (Bean and Smith 1978; Warren 1984).

Despite early European and Spanish contact in 1771, the Serrano remained relatively autonomous until the period between 1819 and 1834 when most of the western Serrano were removed and placed into missions (Bean and Smith 1978; Warren 1984).

Kitanemuk

The Kitanemuk occupied a territory that extended from the Tehachapi Mountains into the western end of the Antelope Valley. While most of their recorded villages were located in the Tehachapi Mountains, their settlement pattern is poorly understood. Some scholars posit that the Antelope Valley's desert floor was used only on a seasonal basis, while others point to archaeological evidence of permanent occupation of the desert floor during the Late Prehistoric Period (Sutton, 1988) (Blackburn and Bean 1978).

Like other Takic-speaking groups, such as the Serrano, Kitanemuk society had a patrilineal organization. Families grouped together into villages, which were headed by a team of "administrative elite" composed of a chief, messengers, and shamans. Kitanemuk subsistence was similar to their neighbors the Tataviam. Primary vegetable food sources included acorns, juniper berries, seeds, and yucca buds. Small game such as antelope and deer supplemented these foods.

Historic Setting

The first Europeans known to have visited the Mojave were Pedro Fages in 1772, and Juan Bautista de Anza and Father Francisco Garcés in 1774 (Greene 1983). In 1775, Father Garcés separated from de Anza and crossed the Mojave along the ancient Mojave Trail from Needles west to the San

Gabriel Mission. Garcés may have crossed the playa of Rogers Dry Lake in the Antelope Valley in 1776 (Boyd 2000).

The Spanish missions that dotted the California coast never spread inland to the Mojave, and the desert remained relatively unexplored and unsettled by Europeans for much of the next century. The Romero-Estudillo Expedition of 1823-24 was an attempt by the Spanish to establish a secure route between the California Coast and Tucson; however, despite two attempts, the expedition never managed to make it as far as the Colorado River (Greene 1983).

The first recorded American visitors to the Mojave were the party of Jedediah Smith, who crossed the Mojave along the Mojave Trail in 1826. Ewing Young and Kit Carson followed his route in the 1820s and 1830s. Kit Carson, who had participated in Jedediah Smith's 1828 expedition, later was the guide for John C. Fremont in 1844. This expedition was one of the first to document the Antelope Valley in detail.

In 1862, the Homestead Act was passed, allowing settlement of public lands and requiring only residence, improvement, and cultivation of the land. Although settlement had been encouraged by the Homestead Act of 1862 and the Desert Land Act of 1877, which permitted disposal of 640-acre tracts of arid public lands at $1.25 per acre to homesteaders if they proved reclamation of the land by irrigation, the Antelope Valley did not see much growth until after the coming of the railroad. In 1876, the Southern Pacific Railroad line (now the Union Pacific Railroad) that ran south from the San Joaquin Valley was connected to the line from Los Angeles, running through the Fremont and Antelope Valleys. Stops along this line were located at Cantil and Cinco, north of the Project area, and Mojave, south of the Project area. In 1884, this line joined the Atchison, Topeka, & Santa Fe line that ran east through Needles (Boyd 2000).

In the 1880s, a number of groups established colonies in the Antelope Valley, including the Quakers, German Lutherans, and Utopian Socialists. However, fluctuating water levels and years of severe drought brought a quick end to many of these colonies. By 1930, over 80 settlements had been established in the region, most along railroad lines. The town of Rosamond was established approximately 5 miles south of the Project area in 1877 along the Southern Pacific line and named for the daughter of a Southern Pacific executive (Gudde 1960).

Agriculture and ranching were the primary economic focus of homesteaders in the Antelope Valley. During the initial wave of settlement in the 1880s and 1890s, dry-farming methods proved fairly successful. However, this was in large part because these were unusually wet years. A severe drought between 1894 and 1904 brought an end to most agricultural enterprises. After the drought, irrigation was used with some success, particularly for the cultivation of alfalfa, which became the valley's primary crop (COLA Public Library 2010). However, the lack of reliable water prevented agriculture from becoming a major industry.

In the arid environment of the high desert, water sources were always a factor in the success of agriculture. Farms were generally located near dependable sources of water such as rivers or springs. Some farmers, however, used wells for irrigation or located their farms near dry lake beds, which periodically flooded during the wet season.

Brief History of the Project Area

This section provides a brief historic context for the Project area and its immediate vicinity. It is based on a desktop review of archival materials including the Bureau of Land Management's (BLM) General Land Office (GLO) records, newspaper articles, census data, city directories, and military records (Ancestry.com, 2021; BLM 2021; Newspapers.com, 2021).

The BLM's GLO records indicate Section 27 of Township 10 North, Range 12 West, within which the Project area is located, was patented to the Southern Pacific Railroad in 1903 and no homesteads were established within the Project area as a result of the railroad's ownership of the land. However, two homesteads were established within the Project area's vicinity in the early 20th century. One 160-acre homestead located in the southeast quarter of section 28, located approximately 200 feet west of the Project area's southwest corner, was established by John D. Faires in 1921 (BLM 2021). Faires was born in Ohio in 1876 and spent his youth and young adulthood in Oklahoma and Kansas (Ancestry.com 2021). By 1910, Faires and his family were living in Los Angeles and he was a brakeman for the railroad. By 1920, Faires re-located to Kern County, established his homestead and was listed as a farmer in the census of that year. It is unclear as to what types of agricultural products Faires' homestead produced and how long Faires cultivated his homestead, but by 1929 Faires passed away and no further information regarding his homestead could be discerned.

The second homestead, comprised of 160 acres within the southwest quarter of Section 22, approximately 300 feet north of the Project area's northwest corner, was patented to Frank Bossaert in 1921. It is unclear as to whether Bossaert ever occupied the homestead given a lack of information regarding his presence in Kern County. Bossaert appears to have been born in Belgium in the mid-1860s and became a naturalized citizen of the United States in 1902 having immigrated to Los Angeles via New York (Ancestry.com 2021). Much of the available census and city directory information indicates Bossaert largely resided in Los Angeles County and there is no documentation of him having lived in Kern County.

Regulatory Framework

Numerous laws and regulations require federal, state, and local agencies to consider the effects a project may have on cultural resources. These laws and regulations stipulate a process for compliance, define the responsibilities of the various agencies proposing the action, and prescribe the relationship among other involved agencies.

State

California Environmental Quality Act

CEQA is the principal statute governing environmental review of projects occurring in the state and is codified at *Public Resources Code (PRC) Section 21000 et seq.* CEQA requires lead agencies to determine if a proposed project would have a significant effect on the environment, including significant effects on historical or unique archaeological resources. Under CEQA (Section 21084.1), a project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.

The *CEQA Guidelines* (Title 14 California Code of Regulations [CCR] Section 15064.5) recognize that historical resources include: (1) a resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (California Register); (2) a resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); and (3) any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California by the lead agency, provided the lead agency's determination is supported by substantial evidence in light of the whole record. The fact that a resource does not meet the three criteria outlined above does not preclude the lead agency from determining that the resource may be an historical resource as defined in PRC Sections 5020.1(j) or 5024.1.

If a lead agency determines that an archaeological site is a historical resource, the provisions of Section 21084.1 of CEQA and Section 15064.5 of the *CEQA Guidelines* apply. If an archaeological site does not meet the criteria for a historical resource contained in the *CEQA Guidelines*, then the site may be treated in accordance with the provisions of Section 21083, which is as a unique archaeological resource. As defined in Section 21083.2 of CEQA a "unique" archaeological resource is an archaeological artifact, object, or site, about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information;
- Has a special and particular quality such as being the oldest of its type or the best available example of its type; or,
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

If an archaeological site meets the criteria for a unique archaeological resource as defined in Section 21083.2, then the site is to be treated in accordance with the provisions of Section 21083.2, which state that if the lead agency determines that a project would have a significant effect on unique archaeological resources, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place (Section 21083.1(a)). If preservation in place is not feasible, mitigation measures shall be required. The *CEQA Guidelines* note that if an archaeological resource is neither a unique archaeological nor a historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment (*CEQA Guidelines* Section 15064.5(c)(4)).

A significant effect under CEQA would occur if a project results in a substantial adverse change in the significance of a historical resource as defined in *CEQA Guidelines* Section 15064.5(a). Substantial adverse change is defined as "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical

resource would be materially impaired" (*CEQA Guidelines* Section 15064.5(b)(1)). According to *CEQA Guidelines* Section 15064.5(b)(2), the significance of a historical resource is materially impaired when a project demolishes or materially alters in an adverse manner those physical characteristics that:

A. Convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or

B. Account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in a historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or

C. Convey its historical significance and that justify its eligibility for inclusion in the California Register as determined by a Lead Agency for purposes of CEQA.

In general, a project that complies with the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* (Standards) (Grimmer, 2017) is considered to have mitigated its impacts to historical resources to a less-than-significant level (*CEQA Guidelines* Section 15064.5(b)(3)).

California Register of Historical Resources

The California Register is "an authoritative listing and guide to be used by State and local agencies, private groups, and citizens in identifying the existing historical resources of the State and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change" (PRC Section 5024.1[a]). The criteria for eligibility for the California Register are based upon National Register of Historic Place (National Register) criteria (PRC Section 5024.1[b]). Certain resources are determined by the statute to be automatically included in the California Register, including California properties formally determined eligible for, or listed in, the National Register.

To be eligible for the California Register, a prehistoric or historic-period property must be significant at the local, state, and/or federal level under one or more of the following four criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

A resource eligible for the California Register must meet one of the criteria of significance described above, and retain enough of its historic character or appearance (integrity) to be recognizable as a historical resource and to convey the reason for its significance. It is possible

that a historic resource may not retain sufficient integrity to meet the criteria for listing in the National Register, but it may still be eligible for listing in the California Register.

Additionally, the California Register consists of resources that are listed automatically and those that must be nominated through an application and public hearing process. The California Register automatically includes the following:

- California properties listed on the National Register and those formally determined eligible for the National Register;
- California Registered Historical Landmarks from No. 770 onward; and,
- Those California Points of Historical Interest that have been evaluated by the OHP and have been recommended to the State Historical Commission for inclusion on the California Register.

Other resources that may be nominated to the California Register include:

- Historical resources with a significance rating of Category 3 through 5 (those properties identified as eligible for listing in the National Register, the California Register, and/or a local jurisdiction register);
- Individual historical resources;
- Historical resources contributing to historic districts; and,
- Historical resources designated or listed as local landmarks, or designated under any local ordinance, such as an historic preservation overlay zone.

California Health and Safety Code Section 7050.5

California Health and Safety Code Section 7050.5 requires that in the event human remains are discovered, the County Coroner be contacted to determine the nature of the remains. In the event the remains are determined to be Native American in origin, the Coroner is required to contact the NAHC within 24 hours to relinquish jurisdiction.

California Public Resources Code Section 5097.98

California PRC Section 5097.98, as amended, provides procedures in the event human remains of Native American origin are discovered during project implementation. PRC Section 5097.98 requires that no further disturbances occur in the immediate vicinity of the discovery, that the discovery is adequately protected according to generally accepted cultural and archaeological standards, and that further activities take into account the possibility of multiple burials. PRC Section 5097.98 further requires the NAHC, upon notification by a County Coroner, designate and notify a Most Likely Descendant (MLD) regarding the discovery of Native American human remains. The MLD has 48 hours from the time of being granted access to the site by the landowner to inspect the discovery and provide recommendations to the landowner for the treatment of the human remains and any associated grave goods.

In the event that no descendant is identified, or the descendant fails to make a recommendation for disposition, or if the landowner rejects the recommendation of the descendant, the landowner

may, with appropriate dignity, reinter the remains and burial items on the property in a location that will not be subject to further disturbance.

California Government Code Sections 6254(r) and 6254.10

These sections of the California Public Records Act were enacted to protect archaeological sites from unauthorized excavation, looting, or vandalism. Section 6254(r) explicitly authorizes public agencies to withhold information from the public relating to "Native American graves, cemeteries, and sacred places maintained by the Native American Heritage Commission." Section 6254.10 specifically exempts from disclosure requests for "records that relate to archaeological site information and reports, maintained by, or in the possession of the Department of Parks and Recreation, the State Historical Resources Commission, the State Lands Commission, the Native American Heritage Commission, another state agency, or a local agency, including the records that the agency obtains through a consultation process between a Native American tribe and a state or local agency."

Assembly Bill 52 and Related Public Resources Code Sections

Assembly Bill (AB) 52 was approved by California State Governor Edmund Gerry "Jerry" Brown, Jr. on September 25, 2014. The act amended California PRC Section 5097.94, and added PRC Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3. AB 52 applies specifically to projects for which a Notice of Preparation (NOP) or a Notice of Intent to Adopt a Negative Declaration or Mitigated Negative Declaration (MND) will be filed on or after July 1, 2015. The primary intent of AB 52 was to include California Native American Tribes early in the environmental review process and to establish a new category of resources related to Native Americans that require consideration under CEQA, known as tribal cultural resources. PRC Section 21074(a)(1) and (2) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe" that are either included or determined to be eligible for inclusion in the California Register or included in a local register of historical resources, or a resource that is determined to be a tribal cultural resource by a lead agency, in its discretion and supported by substantial evidence. On July 30, 2016, the California Natural Resources Agency adopted the final text for tribal cultural resources update to Appendix G of the CEQA Guidelines, which was approved by the Office of Administrative Law on September 27, 2016.

PRC Section 21080.3.1 requires that within 14 days of a lead agency determining that an application for a project is complete, or a decision by a public agency to undertake a project, the lead agency provide formal notification to the designated contact, or a tribal representative, of California Native American Tribes that are traditionally and culturally affiliated with the geographic area of the project (as defined in PRC Section 21073) and who have requested in writing to be informed by the lead agency (PRC Section 21080.3.1(b)). Tribes interested in consultation must respond in writing within 30 days from receipt of the lead agency's formal notification and the lead agency must begin consultation within 30 days of receiving the tribe's request for consultation (PRC Sections 21080.3.1(d) and 21080.3.1(e)).

PRC Section 21080.3.2(a) identifies the following as potential consultation discussion topics: the type of environmental review necessary; the significance of tribal cultural resources; the significance of the project's impacts on the tribal cultural resources; project alternatives or appropriate measures for preservation; and mitigation measures. Consultation is considered concluded when either: (1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or (2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached (PRC Section 21080.3.2(b)).

If a California Native American tribe has requested consultation pursuant to Section 21080.3.1 and has failed to provide comments to the lead agency, or otherwise failed to engage in the consultation process, or if the lead agency has complied with Section 21080.3.1(d) and the California Native American tribe has failed to request consultation within 30 days, the lead agency may certify an EIR or adopt an MND (PRC Section 21082.3(d)(2) and (3)).

PRC Section 21082.3(c)(1) states that any information, including, but not limited to, the location, description, and use of the tribal cultural resources, that is submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public without the prior consent of the tribe that provided the information. If the lead agency publishes any information submitted by a California Native American tribe during the consultation or environmental review process, that information shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public.

Local

Kern County General Plan

The policies, goals, and implementation measures in the Kern County General Plan for cultural resources applicable to the Project are provided below. The Kern County General Plan contains additional policies, goals, and implementation measures that are more general in nature and are not specific to development such as the Project. Therefore, they are not listed below, but all policies, goals, and implementation measures in the Kern County General Plan are incorporated by reference.

Chapter 1. Land Use, Open Space and Conservation Element

1.10.3 Archaeological, Paleontological, Cultural, and Historical Preservation

Policy

> Policy 25: The County will promote the preservation of cultural and historic resources that provide ties with the past and constitute a heritage value to residents and visitors.

Implementation Measures

Measure K: Coordinate with the California State University, Bakersfield's Archaeology Inventory Center.

Measure L: The County shall address archaeological and historical resources for discretionary projects in accordance with CEQA.

Measure N: The County shall develop a list of Native American organizations and individuals who desire to be notified of proposed discretionary projects. This notification will be accomplished through the established procedures for discretionary projects and CEQA documents.

Measure O: On a project-specific basis, the County Planning Department shall evaluate the necessity for the involvement of a qualified Native American monitor for grading or other construction activities on discretionary projects that are subject to a CEQA document

Archival Research

SSJVIC Records Search

A records search for the Project was conducted on March 29, 2021 at the California Historical Resources Information System (CHRIS) Southern San Joaquin Valley Information Center (SSJVIC) housed at California State University, Bakersfield. The records search included a review of all recorded cultural resources and previous studies within the Project area and a 0.5-mile radius of the Project area. The results of the SSJVIC records search are included in **Confidential Appendix B**.

Previous Cultural Resources Investigations

The records search results indicate that seven cultural resources studies have been conducted within a 0.5-mile radius of the Project area (**Table 1**). Approximately 5 percent of the 0.5-mile records search radius has been included in previous cultural resources surveys. Of the seven previous studies identified by the SSJVIC, three (KE-01028, -02323, and -02526) overlap the Project area. These three studies cover approximately 5 percent of the Project area.

TABLE 1
PREVIOUS CULTURAL RESOURCES INVESTIGATIONS

Authors	SSJVIC No. (KE-)	Title	Dates
Demos-Petropoulous, Francine, Dana McGowan, Barry Scott, Teresa O'Brien, Bill Norton, and Wendy Rause,	02323*	*Cultural Resources Inventory Report for the AT&T Corp. Cable Upgrade Project, Los Angeles, Kern, and San Luis Obispo Counties, California*	1999
Giambastiani, Mark, Sinead Ní Ghabhláin, Micah Hale, Andrea Catacora, Dave Iversen, Mark Becker, and Susan Hogan-Conrad,	03878	*Phase II Cultural Resource Evaluations at 21 Sites Along the Northwestern and West Boundaries, Edwards Air Force Base, Kern and Los Angeles Counties, California*	2007

Holmes, Amy	02942	*Final: A Phase II Evaluation of 22 Archaeological Sites Located Within Management Region 1 Edwards AFB, Kern County, CA*	2004
O'Brien, Teresa	02526*	*Cultural Resources Monitoring Report for the AT&T Corp. Cable Upgrade Project for Los Angeles, Kern, and San Luis Obispo Counties, California*	2001
Pruett, Catherine Lewis	00937	*Archaeological Assessment for 350 Acres, North of Rosamond, Kern County, California*	1990
Ronning, Margaret	00015	*Phase I Historic Property Inventory for Fast II Tortoise Test, Edwards AFB, Kern County*	1994
Unknown	01028*	*Cultural Resources Investigation Pacific Pipeline Emidio Route (Including West Liebre Gulch Ridge Alignment and Mojave Alternatives) L.A. and Kern Counties, CA*	1996

*Indicates study overlaps Project area

Previously Recorded Cultural Resources

The records search results indicate that 105 cultural resources have been previously recorded within a 0.5-mile radius of the Project area including six prehistoric archaeological sites, 29 historic-period archaeological sites, three historic-period built resources, 10 prehistoric isolates, and 57 historic-period isolates (**Table 2**). Of these 105 previously recorded resources, 23 are located in the vicinity of the Project area and include one prehistoric archaeological site (P-15-015942), 12 historic-period archaeological sites (P-15-008768, P-15-010171, -011740, -015933, -015934, -015935, -015936, -015937, -015938, -015939, -015940, and -015941), one historic-period built resource (P-15-002050), two prehistoric isolates (P-15-015947 and -015950), and seven historic-period isolates (P-15-015944, -015945, -015946, -015948, -015949, -015951, and -015952). These 23 resources are described in detail following Table 2.

TABLE 2
PREVIOUSLY RECORDED CULTURAL RESOURCES

Primary No. (P-15-)	Permanent Trinomial (CA-KER-)	Description	Dates Recorded	Eligibility Status
002050*	2050H	Historic-period built resource: Southern Pacific Railroad alignment	1985, 1987, 1994, 1995, 1996, 1998, 1999, 2009, 2010, 2011, 2012, 2016, 2018, 2019	Determined National Register ineligible; Potentially California Register eligible
002285	2285H	Historic-period archaeological site: refuse scatter	1980, 1988, 2001, 2008, 2011, 2014	Not evaluated
003921	3921H	Historic-period archaeological site: refuse scatter	1994, 2002, 2011	Not evaluated
004047	-	Prehistoric isolate: rhyolitic debitage	1994, 2011	Not evaluated
004048	-	Historic-period isolate: three fragments of sun colored amethyst glass	1994, 2011	Not evaluated
004049	-	Historic-period isolate: one sun colored amethyst glass fragment	1994, 2011	Not evaluated
004767	-	Historic-period built resource: iron well cover	1995	Not evaluated
005593	4787H	Historic-period archaeological site: remnants of well	1994	Not evaluated
005594	4788H	Historic-period archaeological site: remnants of well	1994	Not evaluated
005595	4789H	Historic-period archaeological site: remnants of well with associated refuse scatter	1994, 2011	Not evaluated
005877	5001	Prehistoric archaeological site: temporary camp site	1997, 2003	Determined National Register ineligible

Primary No. (P-15-)	Permanent Trinomial (CA-KER-)	Description	Dates Recorded	Eligibility Status
007554	-	Prehistoric isolate: chalcedony flake	1990	Not evaluated
008768*	5560	Historic-period archaeological site: refuse scatter	1998	Not evaluated
010171*	5984	Historic-period archaeological site: refuse scatter	2000	Not evaluated
010402	-	Historic-period built resource: water tank	2001	Not evaluated
011740*	6795H	Historic-period archaeological site: refuse scatter	2005, 2007, 2011	Not eligible
011751	6806H	Historic-period archaeological site: refuse scatter	2005	Not eligible
011755	6810H	Historic-period archaeological site: refuse scatter	2005	Not eligible
011756	6811H	Historic-period archaeological site: refuse scatter	2005	Not eligible
011771	-	Historic-period isolate: coffee can	2005	Not evaluated
011772	-	Historic-period isolate: paint can	2005	Not evaluated
011773	-	Historic-period isolate: coffee can	2005	Not evaluated
011774	-	Historic-period isolate: sanitary can	2005	Not evaluated
011775	-	Historic-period isolate: matchstick filler can	2005	Not evaluated
011776	-	Historic-period isolate: matchstick filler can	2005	Not evaluated
011777	-	Historic-period isolate: matchstick filler can	2005	Not evaluated
011778	-	Historic-period isolate: evaporated milk can	2005	Not evaluated
011779	-	Historic-period isolate: crushed metal bucket	2005	Not evaluated
011780	-	Historic-period isolate: sanitary can	2005	Not evaluated
011781	-	Historic-period isolate: matchstick filler can	2005	Not evaluated
011782	-	Historic-period isolate: hole-in-top can	2005	Not evaluated
011783	-	Historic-period isolate: matchstick filler can	2005	Not evaluated
011784	-	Historic-period isolate: matchstick filler can	2005	Not evaluated
011785	-	Historic-period isolate: matchstick filler can	2005	Not evaluated
011786	-	Historic-period isolate: glass insulator	2005	Not evaluated
011787	-	Historic-period isolate: two beverage cans	2005	Not evaluated
011788	-	Historic-period isolate: three glass insulators	2005	Not evaluated
011789	-	Prehistoric isolate: chert flake	2005	Not evaluated
011790	-	Historic-period isolate: sanitary can	2005	Not evaluated
011791	-	Historic-period isolate: sanitary can	2005	Not evaluated
011795	-	Historic-period isolate: matchstick filler can	2005	Not evaluated
011796	-	Historic-period isolate: matchstick filler can	2005	Not evaluated

Primary No. (P-15-)	Permanent Trinomial (CA-KER-)	Description	Dates Recorded	Eligibility Status
011797	-	Historic-period isolate: sanitary can	2005	Not evaluated
011798	-	Prehistoric isolate: chert flake	2005	Not evaluated
011799	-	Historic-period isolate: baking powder can	2005	Not evaluated
011800	-	Historic-period isolate: beverage can	2005	Not evaluated
011801	-	Historic-period isolate: oil can	2005	Not evaluated
011802	-	Historic-period isolate: oil can	2005	Not evaluated
011803	-	Historic-period isolate: sanitary can	2005	Not evaluated
011804	-	Historic-period isolate: oil can	2005	Not evaluated
011805	-	Historic-period isolate: bucket	2005	Not evaluated
011806	-	Historic-period isolate: beverage can	2005	Not evaluated
011807	-	Historic-period isolate: beverage can	2005	Not evaluated
011833	-	Historic-period isolate: beverage can	2005	Not evaluated
011834	-	Historic-period isolate: sun colored amethyst glass fragments	2005	Not evaluated
011850	-	Historic-period isolate: beverage can	2005	Not evaluated
011851	-	Historic-period isolate: beverage can	2005	Not evaluated
011859	-	Historic-period isolate: sanitary can	2005	Not evaluated
011860	-	Historic-period isolate: matchstick filler can	2005	Not evaluated
011861	-	Historic-period isolate: matchstick filler can	2005	Not evaluated
011862	-	Historic-period isolate: matchstick filler can	2005	Not evaluated
011863	-	Historic-period isolate: matchstick filler can	2005	Not evaluated
011864	-	Historic-period isolate: matchstick filler can	2005	Not evaluated
011865	-	Historic-period isolate: sanitary can	2005	Not evaluated
011866	-	Historic-period isolate: sanitary can	2005	Not evaluated
011867	-	Historic-period isolate: matchstick filler can	2005	Not evaluated
011868	-	Historic-period isolate: sanitary can	2005	Not evaluated
011869	-	Historic-period isolate: matchstick filler can	2005	Not evaluated
011870	-	Historic-period isolate: matchstick filler can	2005	Not evaluated
014308	8006	Prehistoric archaeological site: temporary camp site	2008	Not evaluated
014317	8015	Prehistoric archaeological site: lithic scatter	2008	Not evaluated
014318	8016	Prehistoric archaeological site: lithic scatter	2008	Not evaluated
014319	-	Prehistoric isolate: rhyolitic debitage	2008	Not evaluated

Primary No. (P-15-)	Permanent Trinomial (CA-KER-)	Description	Dates Recorded	Eligibility Status
014320	-	Prehistoric isolate: rhyolitic biface	2008	Not evaluated
014335	-	Prehistoric isolate: chert debitage	2008	Not evaluated
015929	8769	Prehistoric archaeological site: lithic scatter	2011	Not evaluated
015930	8770H	Historic-period archaeological site: refuse scatter	2011	Not evaluated
015933*	8773H	Historic-period archaeological site: refuse scatter	2010	Not evaluated
015934*	8774H	Historic-period archaeological site: refuse scatter	2010	Not evaluated
015935*	8775H	Historic-period archaeological site: refuse scatter	2010	Not evaluated
015936*	8776H	Historic-period archaeological site: refuse scatter	2010	Not evaluated
015937*	8777H	Historic-period archaeological site: refuse scatter	2010	Not evaluated
015938*	8778H	Historic-period archaeological site: refuse scatter	2010	Not evaluated
015939*	8779H	Historic-period archaeological site: refuse scatter	2010	Not evaluated
015940*	8780H	Historic-period archaeological site: refuse scatter	2010	Not evaluated
015941*	8781H	Historic-period archaeological site: refuse scatter	2010	Not evaluated
015942*	8782	Prehistoric archaeological site: lithic scatter	2010	Not evaluated
015943	8783H	Historic-period archaeological site: refuse scatter	2011	Not evaluated
015944*	-	Historic-period isolate: sanitary can	2010	Not evaluated
015945*	-	Historic-period isolate: coffee can	2010	Not evaluated
015946*	-	Historic-period isolate: hole-in-cap can	2010	Not evaluated
015947*	-	Prehistoric isolate: projectile point	2010	Not evaluated
015948*	-	Historic-period isolate: hole-in-cap can	2010	Not evaluated
015949*	-	Historic-period isolate: hole-in-cap can	2010	Not evaluated
015950*	-	Prehistoric isolate: rhyolitic flake	2010	Not evaluated
015951*	-	Historic-period isolate: matchstick filler can	2010	Not evaluated
015952*	-	Historic-period isolate: hole-in-cap can	2010	Not evaluated
015953	-	Prehistoric isolate: two rhyolitic tools	2011	Not evaluated
018659	-	Historic-period archaeological site: refuse scatter	2011	Not evaluated
018660	-	Historic-period archaeological site: mine shaft	2011	Not evaluated
020209	11064H	Historic-period archaeological site: refuse scatter	2005	Not evaluated
020210	11065H	Historic-period archaeological site: refuse scatter	2004	Not evaluated
020211	11066H	Historic-period archaeological site: refuse scatter	2005	Not evaluated
020212	11067H	Historic-period archaeological site: refuse scatter	2004	Not eligible

Primary No. (P-15-)	Permanent Trinomial (CA-KER-)	Description	Dates Recorded	Eligibility Status
020213	11068H	Historic-period archaeological site: refuse scatter	2005	Not evaluated

*Indicates resource is in the vicinity of the Project area

Resource Descriptions

P-15-002050

Resource P-15-002050 is a historic-period built resource consisting of the Union Pacific Railroad right-of-way. The railroad was constructed in 1876 by the Southern Pacific Railroad who operated the right-of-way until 1996, at which point the Union Pacific Railroad retained ownership. Resource P-15-002050 has been previously determined not eligible for listing in the National Register (OHP 2012) but has not been evaluated for inclusion in the California Register (National Register Status Code 6Y).

P-15-008768

Resource P-15-008768 is historic-period archeological site recorded by Jones and Stokes in 1998 as a refuse scatter containing 200-300 cans, glass fragments, and ceramic fragments (Norton 1998). Based on the presence of sun-colored amethyst glass, Jones and Stokes concluded the site dates prior to 1920 and likely represents opportunistic roadside dumping. Resource P-15-008768 has not been previously evaluated for inclusion in the California Register or the National Register.

P-15-010171

Resource P-15-010171 is historic-period archaeological site recorded by Jones and Stokes in 2000 as a sparse refuse scatter containing three concentrations (Concentrations 1-3) (O'Brien and Thomas 2000). The site includes over 1,000 cans including sanitary cans, hole-in-top cans, seasoning cans, and tobacco tins; glass fragments including cobalt, green, sun-colored amethyst, and yellow glass; and ceramic fragments including white glazed earthenware, fiesta ware, and thick pipe fragments. Jones and Stokes concluded the site represents opportunistic dumping dating to the 1930s and 1940s (O'Brien and Thomas 2000). Resource P-15-010171 has not been previously evaluated for inclusion in the California Register or the National Register.

P-15-011740

Resource P-15-015933 is a historic-period archaeological site originally recorded in 2005 by ASM as a large diffuse refuse scatter containing two concentrations (Concentrations A and B) likely representing episodic roadside dumping dating to the early 1900s (Hale et al. 2005). The concentrations are described as follows:

> **Concentration A** consists of over 500 cans, 75 percent of which are matchstick-filler and sanitary crimped end food cans, and the remaining 25 percent consists of church-key opened beverage cans, key-wind coffee cans, and internal friction spice cans. The concentration also includes over 30 colorless, green, and brown glass fragments, as well as beer bottle, milk glass, and mason jars.

Concentration B consists of more than 250 cans, primarily comprise of crushed matchstick-filler and sanitary crimped end milk and food cans, as well as one Hershey's cocoa tin with an embossed internal friction lid, several spice cans, beverage cans, internal friction coffee and oil cans, and a variety of amethyst and colorless glass shards.

The site was updated in 2010 by ECORP and was found to largely match ASM's 2005 documentation; however, ECORP noted Concentration A contained only 50-100 cans, many of which were crushed or deteriorated (Cunningham et al. 2011).

Resource P-15-011740 is located in the same mapped location for P-15-010171, and both site descriptions are similar. Therefore, it is likely that P-15-011740 and -010171 are the same resource. Resource P-15-011740 has been determined not eligible for listing in the National Register, California Register, and local register (National Register Status Code 6z).

P-15-015933

Resource P-15-015933 is a historic-period archaeological site recorded in 2010 as a refuse scatter consisting of seven sanitary cans, seven hole-in-top cans, one church key-opened beverage can, two cone top beverage cans, three bottle bases, and one bottleneck fragment (Chandler et al. 2010a). Diagnostic artifacts include: one hole-in-top can with dimensions of $3^{15}/_{16}$ in length by 3 inches in diameter, indicating it was manufactured from 1950 to present (IMACS 2001); and one amber glass Clorox bottle fragment with "[T overlapping M and C]" embossed on it indicating it was manufactured by the Thatcher Manufacturing Company between 1944 and 1983 (glassbottlemarks.com 2021a). Resource P-15-015933 has not been previously evaluated for inclusion in the California Register or the National Register.

P-15-015934

Resource P-15-015934 is a historic-period archaeological site recorded in 2010 by ECORP consisting of a large, dispersed refuse scatter comprised of sanitary cans, hole-in-cap cans, hole-in-top cans, one Log Cabin Syrup can in the shape of a cabin, glass bottle fragment, glass insulator fragments, paint cans, and corroded sheet metal (Chandler et al. 2010b). Diagnostic artifacts include the following: hole-in-cap cans with soldered seams and dimensions of $2^{6}/_{16}$ inches in length by 3 inches in diameter, indicating a manufacture range of 1885 to 1903 (IMACS 2001); hole-in-cap cans with crimped seams and dimension of $4^{12}/_{16}$ in height by 4 inches in diameter, indicating a manufacture range of 1903 to 1908 (IMACS 2001); the Log Cabin Syrup can, which dates to as early as 1897 (Lyon n.d.); and a deteriorated coffee can with ""STEEL CUT COFFEE/ M.J. BRANDENSTEIN" embossed on it, which dates as early as 1899 (MJB 2021). Resource P-15-015934 has not been previously evaluated for inclusion in the California Register or National Register.

P-15-015935

Resource P-15-015935 is a historic-period archaeological site recorded in 2010 by ECORP as a dispersed refuse scatter comprised of sanitary cans, one hole-in-cap can, one hole-in-top can, metal sheet fragments, and two aqua glass insulator fragments (Denniston and Cunningham 2010). The site has not been previously evaluated for inclusion in the California Register or the National Register.

P-15-015936

Resource P-15-015936 is a historic-period archaeological site recorded in 2010 by ECORP as a refuse scatter comprised of knife and ice pick-opened hole-in-top cans, C-cut-opened sanitary cans, and corroded sheet metal fragments (Chandler et al. 2010c). Diagnostic artifacts include one hole-in-cap can with dimension of $2^{8}/_{16}$ in height by $2^{8}/_{16}$ in diameter indicated a manufacture date range of 1903 to 1914 (IMACS 2001). The site has not been previously evaluated for inclusion in the California Register or the National Register.

P-15-015937

Resource P-15-015937 is a historic-period archaeological site recorded in 2010 by ECORP as a refuse concentration with an associated diffuse refuse scatter (Chandler et al. 2010d). The concentration consists of glass bottles fragments, sanitary cans and glass fragments. The associated refuse scatter includes hole-in-cap cans, hole-in-top cans, sanitary cans, bottle glass fragments, bottle glass bases, glass bottle base, one Log Cabin Syrup can made in the shape of a log cabin, one large metal drum, and one paint can. Diagnostic artifacts include: one hole-in-cap with dimensions of $3^{3}/_{16}$ inches in height by $3\ ^{15}/_{16}$ inches in diameter, with a cap diameter of $1^{12}/_{16}$ indicating they were manufactured 1887 to 1885 (IMACS 2001); and the Log Cabin Syrup can, which dates to as early as 1897 (Lyon n.d.). The site has not been previously evaluated for inclusion in the California Register or the National Register.

P-15-015938

Resource P-15-015938 is a historic-period archaeological site documented in 2010 by ECORP as a refuse scatter, comprised of one glass liquor bottle, one cone-top beverage can, and one hole-in-top can (Chandler et al. 2010e). The hole-top-can has dimensions of $3^{14}/_{16}$ inches in height and 3 inches indicating it was manufactured between 1917 and 1929 or 1950 to the present (IMACS 2010). The site has not been previously evaluated for inclusion in the California Register or the National Register.

P-15-015939

Resource P-15-015939 is a historic-period archaeological site documented in 2010 by ECORP as refuse scatter consisting of four refuse concentrations (Concentrations C1-C4) with an associated refuse scatter (Chandler et al. 2010f). The concentrations are described as follows:

> **Concentration 1** includes glass fragments, mason jar lids, a bottle based with an Anchor Hocking maker's mark, and a crushed matchstick-filler.
>
> **Concentration 2** includes hinge-lid tobacco tins, solvent cans, sanitary cans, matchstick-filler cans, tableware fragments, one enameled water basin, plate glass, and one fuel container.
>
> **Concentration 3** includes metal pipes, barrel straps, automotive debris, wire, transferware ceramic plate fragments, glass fragments, sanitary cans, hole-in-cap cans, one matchstick-filler can, sun-colored amethyst glass, mason jar fragments, and tableware fragments. Diagnostic artifacts include: one matchstick-filler can with dimensions of $3\ ^{15}/_{16}$ inches in height and 3 inches in diameter indicating it was

manufactured between 1917 and 1929 (IMACS 2001); two bottle bases with "[Letter M inside a circle]," embossed on them, with one having "EMERSON DRUG/BROMOSELTZER" embossed around the base indicating they were manufactured by the Maryland Glass Corporation after 1916 (Toulouse 1972); and two bottle bases with suction scars indicating they were manufactured between 1919 and 1929 (SHA 2021).

Concentration 4 includes sanitary cans, hinge-lid tobacco tins, one Maxwell House Coffee can with lithograph partially legible, one wooden pipe bowl, circuit tubes, one enamel basin, ironware fragments, milled lumber, as well as a number beverage bottle glass comprised of sun-colored amethyst glass, aqua glass, colorless glass, and green glass, and amber glass. Diagnostic artifacts include ne colorless bottle with "Sierra Club" embossed on its shoulder in cursive script with "stylized S within a diamond" embossed on the base it was manufactured between 1930 and 1950 (Toulouse 1972).

ECORP concluded that the site represents multiple episodes of roadside dumping. Resource P-15-015939 has not been previously evaluated for inclusion in either the California Register or the National Register.

P-15-015940

Resource P-15-015940 is a historic-period archaeological site recorded by ECORP in 2010 a refuse scatter comprised of four hole-in-top cans, one aqua glass insulator, two amber glass bottles, one green glass wine bottle base, and one aqua glass mason jar fragment (Chandler et al. 2010g). Based on the artifact present, ECORP concluded the site represents a single episode of roadside dumping. Resource P-15-015940 has not been previously evaluated for inclusion in the California Register or the National Register.

P-15-015941

Resource P-15-015941is a historic-period archaeological site recorded by ECORP in 2010 as consisting of one refuse concentration (Concentration 1) with an associated sparse refuse scatter (Chandler et al. 2010h). Concentration 1 includes crushed and deteriorated sanitary cans, one hole-in-top can, three terra cotta pipe fragments, one battery, three bottle bases, as well as colorless, green, aqua, and sun-colored amethyst beverage bottle glass fragments. Diagnostic artifacts associated with Concentration 1 include: a bottle base with "[I within a circle and a diamond shape]/ 5" embossed on it indicating it was manufactured by Owens Illinois between 1935 or 1945 (Lockhart 2004); and one bottle base with a Hazel Atlas maker's mark indicating it was manufactured between 1920 and 1964 (Toulouse 1972). The sparse scatter consists of two artifacts including one shoe heel with tacks and one green glass bottle base with "[I within a circle and a diamond shape]/5] embossed on it indicating it as manufactured by Owens Illinois sometime between 1935 and 1945 (Lockhart 20014). ECORP concluded the site represents a single episode of roadside dumping. Resource P-15-015941 has not been previously evaluated for inclusion in the California Register or the National Register.

P-15-015942

Resource P-15-015942 is a prehistoric archaeological site recorded by ECORP in 2010 as a lithic scatter comprised of 25 flakes (Chandler et al. 2010i). Artifacts noted included secondary and tertiary flakes, including 23 rhyolitic flakes and two chert flakes. Resource P-15-015942 has not been previously evaluated for inclusion in the California Register or the National Register.

P-15-015944

Resource P-15-015944 is a historic-period isolate recorded by ECORP in 2010 as one crushed hole-in-top can (Chandler et al. 2010j). The isolate has not been previously evaluated for inclusion in the California Register or the National Register.

P-15-015945

Resource P-15-015945 is a historic-period isolate recorded by ECORP in 2010 as one coffee tin lid and one hole-in-cap can (Chandler et al. 2010k). The coffee tin lid is embossed with a drinking figure surrounded by the words “Hills Bros.” indicating it was manufactured between 1922 and 1932 (Lanford and Mills 2006). Resource P-15-015945 has not been previously evaluated for inclusion in the California Register or the National Register.

P-15-015946

Resource P-15-015946 is a historic-period isolate recorded by ECORP in 2010 as one C-cut-opened hole-in-cap can (Chandler et al. 2010l). The isolate has not been previously evaluated for inclusion in the California Register or National Register.

P-15-015947

Resource P-15-015947 prehistoric isolate recorded by ECORP in 2010 as one rhyolitic projectile point fragment (Chandler et al. 2010m). The isolate has not been previously evaluated for inclusion in the California Register or National Register.

P-15-015948

Resource P-15-015948 is a historic-period isolate recorded by ECORP in 2010 as one hole-in-cap can and one crushed sanitary can (Chandler et al. 2010n). The isolate has not been previously evaluated for inclusion in the California Register or the National Register.

P-15-015949

Resource P-15-015949 is a historic-period isolate recorded in 2010 by ECORP as one hole-in-cap can (Chandler et al. 2010o). The isolate has not been previously evaluated for inclusion in the California Register in National Register.

P-15-015950

Resource P-15-015950 is a prehistoric isolate documented by ECORP in 2010 as one rhyolite secondary flake (Chandler et al. 2010p). The isolate has not been previously evaluated for inclusion in the California Register or the National Register.

P-15-015951

Resource P-15-015951 is a historic-period isolate recorded by ECORP in 2010 as one crushed hole-in-top can (Chandler et al. 2010q). The isolate has not been previously evaluated for inclusion in the California Register and National Register.

P-15-015952

Resource P-15-015952 is a historic-period isolate documented by ECORP in 2010 as one crushed hole-in-cap can (Chandler et al. 2010r). The isolate has not been previously evaluated for inclusion in the California Register or the National Register.

Sacred Lands File Search

The California Native American Heritage Commission (NAHC) maintains a confidential Sacred Lands File (SLF) which contains sites of traditional, cultural, or religious value to the Native American community. The NAHC was contacted on March 15, 2021 to request a search of the SLF. The NAHC responded to the request in a letter dated April 7, 2021. The results of the SLF search conducted by the NAHC indicate that Native American cultural resources are not known to be located within the Project area or its vicinity (**Appendix C**). However, not all California Native American tribes utilize the SLF database managed by the NAHC. The County will conduct consultation with appropriate tribes per requirements of Assembly Bill 52 (AB 52), and the results of this consultation will be summarized in the EIR.

Historic Maps and Aerial Photographs

Historic maps and aerial photographs were examined to provide historical information regarding the Project area, in order to contribute an assessment of the Project area's archaeological sensitivity. Available topographic maps include the 1915 and 1917 Elizabeth Lake 30-minute quadrangles, the 1943 and 1956 Rosamond 15-minute quadrangles, the 1947 and 1973 Soledad Mountain 7.5-minute quadrangles. Historic aerial imagery of the Project area was available for the years 1952, 1972, 1994, 2005, 2009, 2010, 2012, 2014, 2016 and 2018 (Google Earth, 2021; historicaerials.com 2021; UCSB 2021).

The 1915 and 1917 topographic maps show the Project area is bounded north-south and east-west oriented roads analogous to present-day Sopp Road to the north Sopp and Sierra Highway to the west. The maps also depict the Southern Pacific Railroad bounding the Project's western margin. The 1917 map depicts one structure along the Project area's northern boundary just south of Sopp Road; however, by 1943 the structure is no longer depicted. The 1947 map shows a number of structures north of Sopp Road, within approximately 250 feet of the Project areas, northwest corner, as well as structures with the placename "Faires" located west of the Southern Pacific Railroad and Sierra Highway approximately 200 feet west of the Project area's southwest corner. This is likely a reference to the John D. Faires homestead. The 1973 map shows no changes aside from the placename of "Faires" previously depicted west of the Project area is no longer present.

The historic aerial imagery largely shows what is depicted by the topographic maps in that the Project area remained largely undeveloped throughout the 20th century. The 1952 photograph shows structures north of Sopp Road, approximately 250 feet north of the Project area's

northwestern boundary, as well as structures approximately 200 feet west of the southwestern boundary. The 1976 through 2016 photographs show no change in the Project area; however, by 2017, the scrap yard located within the Project area's northern boundary and by 2018 a large circular-shaped area south of the scrap yard has been cleared and graded in the Project area's north-central portion.

In sum, the historic map and aerial review indicate very little development within the Project area during the 20th century aside from a single structure located in the Project area's northwestern corner on the 1917 topographic map, but no longer present on the 1943 map. Additional development within the Project area does not occur until 2017 when a scrap yard located within the Project area's northern boundary was established.

Subsurface Archaeological Resource Sensitivity Review

A desktop analysis was undertaken to assess the potential for subsurface archaeological resources within the Project area. Sources reviewed include geologic maps, soil maps, geologic reports, as well as the results of the SSJVIC records search and historic map and aerial review.

A review of geologic mapping (Diblee and Minch 2008) indicates recent Quaternary alluvial deposits (Qa) are mapped at the surface within the Project area. The deposits formed as a result of alluvial fan activity originating from the Rosamond Hills located approximately 1.6 miles southeast of the Project area. The alluvium dates to the Holocene (11,650years BP to present), a period of time that encompasses the entirety of human occupation in the western Mojave Desert.

Soils within the Project area are mainly comprised of Cajon loamy sand and Desatzo loamy sand with a lesser degree of Garlock loamy sandy. The Cajon loamy sand soil type is comprised of alluvium derived from granite parent material that forms at the bases of slopes along flood plains or alluvial fans, and consists of the following two horizons: 0 to 20 inches of loamy sand (H1) followed by 20 to 60 inches of gravelly loamy sand (H2) (NRCS 2021a). The Desatzo loamy sandy soil type is comprised of alluvium derived from granite parent material that form at the bases of slopes along flood plains and basin floors, and consists of the following three horizons: 0 to 11 inches of sandy loam (H1), followed by11 to 52 inches of very gravelly clay loam (H2), and 52 to 65 inches of clay loam (H3) (NRCS 2021b). The Garlock loamy sand soil type is comprised of alluvium derived from granite parent material that forms at the bases of slopes along terraces and alluvial fans, and consists of the following five horizons: 0 to 12 inches of loamy sand (H1), followed by 12 to 24 inches of sandy clay loam (H2); followed by 24 to 33 inches of sandy loam (H3), followed by 33 to 51 inches of gravelly loamy sand (H4), and 51 to 60 inches of very gravelly loamy sand (H5) (NRCS 2021c). The Cajon and Desatzo soils encompass much of the Project area's central portion, with the Garlock soils being present solely in the Project area's southeastern corner.

The SSJVIC records search identified 16 previously recorded prehistoric archaeological resources within 0.5 miles of the Project area. These resources included four lithic scatters (P-15-014317, -014318, -015929, and -015942), two temporary camp sites (P-15-005877 and -014308), and 10 isolated artifacts (-004047, -007554, -011789, -011798, -014319, -014320, -014335, -015947, -015950, and -015953) primarily comprised of rhyolitic and chert debitage. Of these previously

recorded resources, one of the temporary camps (P-15-005877) was subject to testing and was found to contain a sparse subsurface component comprised of lithic debitage, faunal remains, and a hearth feature, which yielded Carbon-14 samples dating to 1,460±30 years before present (Jones et al. 2003). Based on the excavations, it was postulated that the site represents a temporary campsite inhabited on a seasonal basis.

The number and distribution of prehistoric archaeological resources in the Project area's vicinity indicate a moderate degree of activity in the area throughout prehistory. The two temporary camps sites are located in the vicinity of seasonal drainages, with P-15-014308 being located just south series of seasonal drainages, and P-15-005877 being located near a number of drainages emanating from the Rosamond Hills. These drainages may have attracted peoples to the area on a seasonal basis when water was present, and the intervening areas may have been used for resource procurement, including the gathering of plant resources and toolstone material.

The subsurface archaeological sensitivity review indicates Holocene-age Quaternary alluvial deposits are mapped at surface within the Project's area. These deposits encompass the entirety of human occupation within the western Mojave Desert, and are, therefore, of suitable age to preserve subsurface archaeological deposits. The soil types present in the Project area are sandy in composition and are derived from alluvial processes that, overtime, may cover previously surficial archaeological resources. Further, the Project area and its vicinity appear to have seen a moderate degree of activity throughout the prehistoric period as indicated by the number of seasonal campsites and lithic scatters in the Project area's vicinity. Based on these variables, the Project area has a moderate to high sensitivity for the presence of subsurface archaeological resources.

Phase I Cultural Resources Survey

Methods

A cultural resources survey was conducted by ESA cultural resources specialists Michael Vader, B.A., Matheson Lowe, B.A., and Miranda Rodriguez, B.A. on May 3-4, 2021. The survey was aimed at identifying surface evidence of archaeological materials and historic-period built features. Survey methodology largely consisted of systematic survey with transects spaced at no greater than 15-meter intervals (approximately 50 feet). Inaccessible areas were subject to opportunistic and reconnaissance-level survey strategies. These total less than 6% of the Project area and appear to have been subject to surficial disturbances; no additional survey of these areas is necessary.

Sites were defined as consisting of one or more cultural features or three or more artifacts (45 years old or older) within an approximate 25-square-meter area. Fewer than three artifacts within 25-square-meter area were considered isolates. Newly recorded resources were assigned temporary numbers, photographed, and documented on DPR 523 forms. Previously recorded resources were updated on DPR 523 forms, as necessary. All DPR 523 forms are included in **Confidential Appendix D.**

Results

Much of the Project area is comprised of flat terrain that has been subject to a handful of ground disturbing activities in the recent past including: vegetation clearing and grading in Project area's northwestern and central areas (**Figure 5**), large areas that had recently been mowed and were largely denuded of vegetation (Figure 5), and the presence of a scrap yard and pallet staging yard in the Project area's north-central portion (**Figure 6**). Grading and other activities appear to have disturbed surficial soils; however, the depth of these disturbances is unknown. Given that much of the Project area had been either graded or recently mowed, ground surface visibility was largely 100 percent. However, small pockets of sparse vegetation consisting of salt brush, creosote, and Joshua tree were present in the Project area's northeastern portions and along its western margin. These areas had ground surface visibility of 90 percent (Figure 6). The scrap yard was inaccessible and the pallet staging yard was subject to opportunistic survey. Survey coverage is depicted in **Confidential Figure 7**.

Of the 23 cultural resources identified in the vicinity of the Project area as part of the SSJVIC records search, 10 (P-15-002050 [Southern Pacific Railroad], -008768 [refuse scatter], -011740 [refuse scatter], -015933 [refuse scatter], -015934 [refuse scatter], -015935 [refuse scatter], -015937 [refuse scatter and debitage], -15938 [refuse scatter and debitage], -015941 [refuse scatter], and -015942 [lithic scatter]) were relocated and updated. The remaining 13 previously recorded cultural resources (P-15- 010171 [refuse scatter], -015936 [refuse scatter], -015939 [refuse scatter], -015940 [refuse scatter], -015944 [historic-period isolate], -015945 [historic-period isolate], -015946 [historic-period isolate], -015947 [prehistoric isolate], -015948 [historic-period isolate], -015949 [historic-period isolate], -015950 [prehistoric isolate], -015951 [historic-period isolate], -015952 [historic-period isolate]) identified by the records search could not be relocated. These 13 cultural resources (4 historic sites, 2 prehistoric isolates, 7 historic isolates), all of which are resource types surficial in nature, appear to have been destroyed by recent grading and mowing. In addition to the 10 previously recorded resources, three newly recorded resources (ESA-MMM-Site-001H [refuse scatter], ESA-MMM-Site-002H [refuse scatter], and ESA-MMM-ISO-001P [prehistoric isolate]) were also identified. These resources are summarized in **Table 3** and are depicted in **Confidential Appendix E**. Detailed descriptions of these resources are provided following Table 3.



Overview of graded and de-vegetated areas within Project area (view to NW)



Detail of mowed areas within Project area (view to south)

SOURCE: ESA, 2021

Mojave Micro Mill Project

Figure 5
Survey Photos



Overview of scrap yard in north-central portion of Project area (view to north)



Overview of vegetated area within southeastern portion of Project area (view to west)

SOURCE: ESA 2021

Mojave Micro Mill Project

Figure 6
Survey Photos

Figure 7 Survey Coverage - Confidential

TABLE 3 CULTURAL RESOURCES SURVEY RESULTS SUMMARY

Primary No. (P-15-)	Permanent Trinomial (CA-KER-)	Other Identifier	Description	Relocated/Recorded?
Previously Recorded Resources				
002050	2050H	-	Historic-period built resource: Southern Pacific Railroad alignment	Yes
008768	5560	-	Historic-period archaeological site: refuse scatter	Yes
010171	5984	-	Historic-period archaeological site: refuse scatter	No - Presumed destroyed
011740	6795H	-	Historic-period archaeological site: refuse scatter	Yes
015933	8773H	-	Historic-period archaeological site: refuse scatter	Yes
015934	8774H	-	Historic-period archaeological site: refuse scatter	Yes
015935	8775H	-	Historic-period archaeological site: refuse scatter	Yes
015936	8776H	-	Historic-period archaeological site: refuse scatter	No - Presumed destroyed
015937	8777H	-	Multicomponent archaeological site: historic-period refuse scatter and prehistoric debitage	Yes
015938	8778H	-	Multicomponent archaeological site: historic-period refuse scatter and prehistoric debitage	Yes
015939	8779H	-	Historic-period archaeological site: refuse scatter	No - Presumed destroyed
015940	8780H	-	Historic-period archaeological site: refuse scatter	No - Presumed destroyed
015941	8781H	-	Historic-period archaeological site: refuse scatter	Yes
015942	8782	-	Prehistoric archaeological site: lithic scatter	Yes
015944	-	-	Historic-period isolate: sanitary can	No - Presumed destroyed
015945	-	-	Historic-period isolate: coffee can	No - Presumed destroyed
015946	-	-	Historic-period isolate: hole-in-cap can	No – Possibly subsumed by ESA-MMM-Site-002H
015947	-	-	Prehistoric isolate: projectile point	No - Presumed destroyed
015948	-	-	Historic-period isolate: hole-in-cap can	No - Presumed destroyed
015949	-	-	Historic-period isolate: hole-in-cap can	No - Presumed destroyed
015950	-	-	Prehistoric isolate: rhyolitic flake	No - Presumed destroyed
015951	-	-	Historic-period isolate: matchstick filler can	No - Presumed destroyed
015952	-	-	Historic-period isolate: hole-in-cap can	No - Presumed destroyed
Newly Recorded Resources				
-	-	ESA-MMM-Site-001H	Historic-period archaeological site: refuse scatter	Yes
-	-	ESA-MMM-Site-002H	Historic-period archaeological site: refuse scatter	Yes
-	-	ESA-MMM-ISO-001P	Prehistoric isolate: one piece of debitage	Yes

Resource Descriptions

Previously Recorded Resources

P-15-002050

Resource P-15-002050 is a historic-period built resource consisting of the Union Pacific Railroad right-of-way. The resource has been previously determined not eligible for listing in the National Register (OHP 2012) but has not been evaluated for inclusion in the California Register (National Register Status Code 6Y).

P-15-008768

Resource P-15-008768 is historic-period archeological site originally documented in 1998 consisting of a refuse scatter representing roadside dumping that contains 200-300 cans, glass fragments, and ceramic fragments dating prior to the 1920s (Norton 1998). The site was relocated as part of the present survey and was found to consist of one refuse concentration with an associated sparse refuse scatter (**Confidential Figure 8**). The concentration includes brown, colorless, and clear glass fragments, as well as a crushed cone top beverage can, and hole-in-top cans. The associated scatter includes a sparse scatter of sanitary cans.

The number and distribution of cans noted as part of the site's original 1998 documentation were not identified as part of the present survey, resulting in a reduction in the size of the site's boundary. Resource P-15-008768 has not been previously evaluated for inclusion in the California Register or the National Register.

P-15-010171 (Not Relocated)

Resource P-15-010171 is historic-period archaeological site recorded in 2000 as consisting of three refuse concentrations (Concentrations 1-3) with an associated sparse refuse scatter representing opportunistic dumping dating to the 1930s and 1940s. (O'Brien and Thomas 2000) (Figure 8).

As part of the current survey, the mapped location of Concentration 3 was inspected but no evidence of the concentration was identified.

Resource P-15-010171 is located in the same mapped location as P-15-011740, and both site descriptions are similar. Therefore, it is likely that P-15-011740 and -010171 are the same resource. Resource P-15-011740 has been determined not eligible for listing in the National Register, California Register, and local register (National Register Status Code 6z), and, therefore, P-15-010171 is also assumed to be ineligible.

Figure 8 Resource Photos - Confidential

P-15-011740

Resource P-15-011740 is a historic-period archaeological originally recorded in 2005 and updated in 2010 as consisting of a large diffuse refuse scatter containing two concentrations (Concentrations A and B) likely representing episodic road-side dumping dating to the early 1900s (Hale et al. 2005). As part of the current survey, a generalized and sparse refuse scatter containing both modern and historic items was identified (**Figure 9**). The scatter is comprised of brown, clear, and green beverage bottle fragments, as well as crushed sanitary and hole-in-top cans. Due to the refuse scatter's proximity to P-15-011740, it is assumed this scatter is an extension of P-15-011740's western boundary, which, when originally delineated in 2005, was arbitrarily constrained by the fenced boundary of Edwards Air Force Base. Resource P-15-011740 has been determined not eligible for listing in the National Register, California Register, and local register (National Register Status Code 6z).

P-15-015933

Resource P-15-015933 is a historic-period archaeological site recorded in 2010 as a refuse scatter consisting of seven sanitary cans, seven hole-in-top cans, one church key-opened beverage can, two cone top beverage cans, three bottle bases, and one bottleneck fragment (Chandler et al. 2010a). The site was relocated as part of the current survey and was found to be comprised of only one hole-in-top can in the site's northwestern boundary, and a concentration of white tableware fragments in the site's southeastern portion (Figure 9). Also noted in the site's immediate vicinity were large piles of modern roofing, likely illegally dumped on site. Resource P-15-015933 has not been previously evaluated for inclusion in the California Register or the National Register.

P-15-015934

Resource P-15-015934 is a historic-period archaeological site recorded in 2010 as a large dispersed refuse scatter dating to the late 19th and early 20th centuries (Chandler et al. 2010b). The site was relocated as part of the current survey and was largely found to match previous descriptions in terms of artifact types and distribution. The one exception being the site's northern boundary has been destroyed as part of the vegetation clearing and grading (**Figure 10**). Resource P-15-015934 has not been previously evaluated for inclusion in the California Register or National Register.

P-15-015935

Resource P-15-015935 is a historic-period archaeological site recorded in 2010 as a dispersed refuse scatter comprised of sanitary cans, one hole-in-cap can, one hole-in-top can, metal sheet fragments, and two aqua glass insulator fragments (Denniston and Cunningham 2010). The site was relocated as part of the current survey and was found to match the previous description (Figure 10). Resource P-15-015935 has not been previously evaluated for inclusion in the California Register or the National Register.

Figure 9 Resource Photos - Confidential

Figure 10 Resource Photos - Confidential

P-15-015936 (Not Relocated)

Resource P-15-015936 is a historic-period archaeological site recorded in 2010 as a refuse scatter comprised of knife and ice pick-opened hole-in-top cans, C-cut-opened sanitary cans, and corroded sheet metal fragments dating to the early 20th century (Chandler et al. 2010c). The site was inspected as part of the current survey; however, none of the previously recorded artifacts were present (**Figure 11**). The site is presumed to have been destroyed by the recent mowing and is, therefore, not discussed further in this report.

P-15-015937

Resource P-15-015937 is a historic-period archaeological site recorded in 2010 as a refuse concentration with an associated diffuse refuse scatter dating to the late 19th century (Chandler et al. 2010d). The site was relocated as part of the current survey and was found to largely match its previous description in that it consists of one refuse concentration and an associated diffuse scatter (Figure 11). The concentration is located in the site's northern end and includes more than 50 sun-colored amethyst glass fragments, brown glass fragments, more than 40 aqua glass fragments, tableware fragments, one sun-colored amethyst bottle finish, one clear glass bottle finish, one sun-colored amethyst glass bottle base with no maker's mark, and one colorless glass bottle base with a suction scar. The diffuse scatter extends south of the concentration and includes hole-in-cap cans, and friction lid cans. In addition to the historic-period artifacts, one fine grained metavolcanic flake (FGMV) was also identified amongst the refuse scatter, making the site multicomponent. Many of the previously recorded artifacts including the metal drum, paint cans, sanitary cans, hole-in-top cans, and the log cabin syrup can could not be relocated. This may be due to the area having been mowed, which may have shredded and dispersed the metal artifacts. Additionally, the site was identified approximately 100 feet northwest of its previously mapped location. Resource P-15-015937 has not been previously evaluated for inclusion in the California Register or the National Register.

P-15-015938

Resource P-15-015938 is a historic-period archaeological site documented in 2010 as a refuse scatter dating to the early 20th century comprised of one glass liquor bottle, one cone-top beverage can, and one hole-in-top can (Chandler et al. 2010e). The site was relocated as part of the current survey and was found to include two crushed cans, one sardine tin, and brown glass fragments. In addition to the historic-period artifacts one rhyolitic flake was identified making the site multicomponent (**Figure 12**). Resource P-15-015938 has not been previously evaluated for inclusion in the California Register or the National Register.

Figure 11 Resource Photos- Confidential

Figure 12 Resource Photos- Confidential

P-15-015939 (Not Relocated)

Resource P-15-015939 is a historic-period archaeological site documented in 2010 as a refuse scatter consisting of four refuse concentrations and an associated lithic scatter dating to the early and mid-20th century (Chandler et al. 2010f). Much of the site appears to have been destroyed (see Figure 12). The only artifacts identified associated with the site included cobalt blue glass fragments located along the scrap yard's southern margin. The site is presumed to have been destroyed and is, therefore, not discussed further in this report.

P-15-015940 (Not Relocated)

Resource P-15-015940 is a historic-period archaeological site recorded in 2010 as a refuse scatter likely representing a single episode of roadside dumping (Chandler et al. 2010g). The sitewas inspected as part of the current survey (**Figure 13**). No artifacts associated with the site could be detected as a result. The site is presumed to have been destroyed and is, therefore, not discussed further in this report.

P-15-015941

Resource P-15-015941 is a historic-period archaeological site recorded in 2010 as consisting of one refuse concentration (Concentration 1) with an associated sparse refuse scatter dating to the early to mid-20th century (Chandler et al. 2010h). The site was relocated as part of the current survey and was found to consist of a small refuse concentration comprised of one leather boot heel, one green glass bottle base, various glass and tableware fragments, crushed sanitary cans, and terra cotta pipe fragments (Figure 13). None of the diagnostic artifacts recorded as part of the 2010 documentation were noted. Additionally, the site was identified approximately 140 feet south of its previously mapped location. Resource P-15-015941 has not been previously evaluated for inclusion in the California Register or the National Register.

P-15-015942

Resource P-15-015942 is a prehistoric archaeological site recorded in 2010 as a lithic scatter comprised of rhyolitic and chert flakes (Chandler et al. 2010i). The site was relocated as part of the current survey and was found to consist of only three rhyolitic flakes, one quartzite flake, and one chert flake (**Figure 14**). The site appears to have been subject to recent mowing, which led to the landform's deflation and may have dispersed the additional flakes noted as part of the site's 2010 documentation. Resource P-15-015942 is discussed further in the *Extended Phase I* Section of this report.

Figure 13 Resource Photos - Confidential

Figure 14 Resource Photos- Confidential

P-15-015944 (Not Relocated)

Resource P-15-015944 is a historic-period isolate recorded in 2010 as consisting of one crushed hole-in-top can (Chandler et al. 2010j). The isolate was inspected as part of the survey but could not be relocated. The isolate is presumed to have been destroyed by the recent mowing and is, therefore, not discussed further in this report.

P-15-015945 (Not Relocated)

Resource P-15-015945 is a historic-period isolate recorded in 2010 as consisting of one coffee tin lid and one hole-in-cap can (Chandler et al. 2010k). The isolate was inspected as part of the current survey but could not be relocated. The isolate is presumed to have been destroyed by the recent mowing and is, therefore, not discussed further in this report.

P-15-015946 (Subsumed by ESA-MMM-Site-002H)

Resource P-15-015946 is a historic-period isolate recorded in 2010 as consisting of one C-cut-opened hole-in-cap can (Chandler et al. 2010l). The isolate's mapped location is located within 20 feet of newly recorded historic-period archaeological site, ESA-MMM-Site-002H (discussed below) and is likely an element of that site.

P-15-015947 (Not Relocated)

Resource P-15-015947 prehistoric isolate recorded in 2010 as consisting of one rhyolitic projectile point (Chandler et al. 2010m). The isolate was inspected as part of the current survey but could not be relocated. The isolate is presumed to have been destroyed by the recent mowing and is, therefore, not discussed further in this report.

P-15-015948 (Not Relocated)

Resource P-15-015948 is a historic-period isolate recorded in 2010 as one hole-in-cap can and one crushed sanitary can (Chandler et al. 2010n). The isolate was inspected as part of the current survey but could not be relocated. The isolate is presumed to have been destroyed by the recent mowing and is, therefore, not discussed further in this report.

P-15-015949 (Not Relocated)

Resource P-15-015949 is a historic-period isolate recorded in 2010 as one hole-in-cap can (Chandler et al. 2010o). The isolate was inspected as part of the current survey but could not be relocated. The isolate is presumed to have been destroyed by the recent mowing and is, therefore, not discussed further in this report.

P-15-015950 (Not Relocated)

Resource P-15-015950 is a prehistoric isolate documented in 2010 as one rhyolite secondary flake (Chandler et al. 2010p). The isolate was inspected as part of the current survey but could not be relocated. The isolate is presumed to have been destroyed by the recent mowing and is, therefore, not discussed further in this report.

P-15-015951 (Not Relocated)

Resource P-15-015951 is a historic-period isolate recorded in 2010 as one crushed hole-in-top can (Chandler et al. 2010q). The isolate was inspected as part of the current survey but could not

be relocated. The isolate is presumed to have been destroyed by the recent mowing and is, therefore, not discussed further in this report.

P-15-015952 (Not Relocated)

Resource P-15-015952 is a historic-period isolate documented in 2010 as one crushed hole-in-cap can (Chandler et al. 2010r). The isolate was inspected as part of the current survey but could not be relocated. The isolate is presumed to have been destroyed by the recent mowing and is, therefore, not discussed further in this report.

Newly Recorded Resources

ESA-MMM-Site-001H

Resource ESA-MMM-Site-001H is a historic-period archeological site consisting of two refuse concentrations (Concentration -1 and -2) with an associated refuse scatter (see Figure 14). The concentrations are located approximately 30 feet apart on a generally northwest-southeast axis with Concentration-1 located in the northern portion of the site and Concentration-2 in the southern portion. The following describes both concentrations:

> **Concentration-1** is comprised of brown, green, sun-colored amethyst, and colorless bottle glass fragments, as well as five bottle bases, and four deteriorated sanitary cans. Diagnostic artifacts include: one bottle base with "R105/2846/457/[Stylized T overlapping M and C]5" embossed on it indicating it was manufactured by the Thatcher Glass Manufacturing Company between 1944 and 1980 (glassbottlemarks.com 2021a); one ovular bottle base with "-/22/-54 [Stylized A within a circle over a dashed line]" embossed on it indicating it was manufactured by the Armstrong Cork Company between 1938 and 1969 (glassbottlemarks.com 2021b); and one bottle base with "NET contents/20 [I inside of O]6/1526-BW/6 fluid ozs" indicating it was manufactured by the Owens Illinois Glass Company from 1954 onward (Toulouse 1972).
>
> **Concentration-2** is comprised of brown and colorless bottle glass fragments, crockery fragments, tableware fragments, one cone-top can, and deteriorated sanitary cans.

The site has not been previously evaluated for inclusion in the California Register or National Register.

ESA-MMM-Site-002H

Resource ESA-MMM-Site-002H is a historic-period archaeological site consisting of a diffuse refuse scatter. Artifacts noted included over 25 sun-colored amethyst glass fragments, over 25 aqua glass fragments, over 15 tableware fragments, four brown glass fragments, three green glass bottle fragments, one small metal pail, and one aqua glass bottle fragment with "Tonic/Vermifuge" embossed on it (**Figure 15**). The presence of sun-colored amethyst glass indicates the site dates to 1915 or earlier (SHA 2020).

The site is located in an area that has been subject to vegetation clearing and grading. Given that the site is located within a highly disturbed area, it may represent a secondary deposit of refuse that may have been pushed into its present location by grading activities. The site has not been previously evaluated for inclusion in the California Register or National Register.

Figure 15 Resource Photos- Confidential

ESA-MMM-ISO-001P

Resource ESA-MMM-ISO-001P is a prehistoric isolate consisting of two flakes located approximately 30 feet apart. The flakes include one rhyolitic secondary flake and one mottled brown-red chert tertiary flake with edge modification (Figure 15). The isolate has not been previously evaluated for inclusion in the National Register or California Register.

Extended Phase I Investigation

ESA archaeologists Michael Vader, B.A., and Miranda Rodriguez, B.A., conducted an Extended Phase I Investigation (XP1 Investigation) at prehistoric archaeological site P-15-015942 on December 12, 2021 under the supervision of the Principal Investigator, Monica Strauss, M.A., RPA. The investigation was aimed at identifying the presence/absence of subsurface archaeological materials associated with the site, and to assess the site's eligibility for listing in the California Register under Criteria 1 - 4. No subsurface materials were encountered. As such prehistoric archaeological site P-15-015942 is recommended ineligible for listing in the California Register and does not qualify as either a historical resource or a unique archaeological resource under CEQA. The following section summarizes the methods and results of the testing program.

Methods

A total of 12 hand auger bores (HABs) were excavated. The HABs were laid out on cardinal axes oriented north to south and east to west within the boundary of P-15-015492 and spaced at 25-meter intervals. The HABs measured 10 centimeters in diameter and were excavated in arbitrary 20-centimeter levels until at least one level of culturally sterile soil or a maximum depth of 1 meter was reached. Soils from each 20-centimeter level were screened using 1/8-inch hardware mesh. The contents of each level were documented on an HABs record form. Each HABs location was mapped using a sub-meter GPS unit and photographed prior to being backfilled.

Results

None of the 12 HABs excavated produced cultural materials. Of the 12 HABs, six were excavated to a depth of 40 centimeters and 6 were excavated to a depth of 20 centimeters. Observed soils and sediments within the site's boundary were largely consistent and were comprised of loose yellowish brown sandy silt with less than 1 to 1 centimeter diameter pebbles. **Table 4** summarizes the findings for each HAB and **Confidential Appendix F** depicts the placement of the 12 HABs within the site's boundary. HAB forms are provided in **Appendix G**.

TABLE 4 HABS EXCAVATION SUMMARY

HAB No.	Max Depth (cm)	Soils/Sediments Description	Cultural Materials
1	20	Loose yellowish-brown sandy silt with less than 1 to 1 centimeter diameter pebbles	Negative
2	40	Loose yellowish-brown sandy silt with less than 1 to 1 centimeter diameter pebbles	Negative
3	40	Loose yellowish-brown sandy silt with less than 1 to 1 centimeter diameter pebbles	Negative

HAB No.	Max Depth (cm)	Soils/Sediments Description	Cultural Materials
4	40	Loose yellowish-brown sandy silt with less than 1 to 1 centimeter diameter pebbles	Negative
5	20	Loose yellowish-brown sandy silt with less than 1 to 1 centimeter diameter pebbles	Negative
6	20	Loose yellowish-brown sandy silt with less than 1 to 1 centimeter diameter pebbles	Negative
7	20	Loose yellowish-brown sandy silt with less than 1 to 1 centimeter diameter pebbles	Negative
8	40	Loose yellowish-brown sandy silt with less than 1 to 1 centimeter diameter pebbles	Negative
9	40	Loose yellowish-brown sandy silt with less than 1 to 1 centimeter diameter pebbles	Negative
10	20	Loose yellowish-brown sandy silt with less than 1 to 1 centimeter diameter pebbles	Negative
11	20	Loose yellowish-brown sandy silt with less than 1 to 1 centimeter diameter pebbles	Negative
12	40	Loose yellowish-brown sandy silt with less than 1 to 1 centimeter diameter pebbles	Negative

Significance Evaluations and Impacts Assessment

Of the 23 cultural resources identified in the vicinity of the Project area as part of the SSJVIC records search, 10 (P-15-002050 [Southern Pacific Railroad], -008768 [refuse scatter], -011740 [refuse scatter], -015933 [refuse scatter], -015934 [refuse scatter], -015935 [refuse scatter], 015937 [refuse scatter and debitage], -15938 [refuse scatter and debitage], -015941 [refuse scatter], and -015942 [lithic scatter]) were relocated as part of the survey conducted for the Project, and 13 (P-15-010171 [refuse scatter], -015936 [refuse scatter], -015939 [refuse scatter], -015940 [refuse scatter], -015944 [isolate], -015945 [isolate], 015946 [isolate], 015947 [isolate], 015948 [isolate], -015949 [isolate], -015950 [isolate], -015951 [isolate], and -015952 [isolate]) could not be relocated and based on the surficial nature of these resource types are presumed to have been destroyed or displaced. In addition to the 10 relocated resources, three newly recorded resources (ESA-MMM-Site-001H [refuse scatter], ESA-MMM-Site-002H [refuse scatter], and ESA-MMM-ISO-001P [isolate]) were identified as a result of the cultural resources survey.

Of the total 13 cultural resources (10 previously recorded and 3 newly recorded) identified in the vicinity of the Project area, one has been previously recommended not eligible for inclusion in the California Register (P-15-011740), with the remaining 12 resources having not been previously evaluated. The following paragraphs evaluate each of the 12 previously unevaluated resources as historical resources based on California Register Criteria 1-4, as well as unique archaeological resources under Public Resources Code 21803.2(g). An assessment of potential impacts the Project may have on these resources is also included. The resource evaluations and impacts assessments are organized by resource type including: historic-period built resources, historic period archaeological sites, prehistoric archaeological sites, multicomponent archaeological sites, and isolates. **Table 5** summarizes the evaluation recommendations and impacts assessments for these resources.

TABLE 5 SUMMARY OF EVALUATION STATUS AND POTENTIAL IMPACTS

Primary No. (P-15-)	Permanent Trinomial (CA-KER-)	Other Identifier	Description	Eligibility Status	Potential for Significant Project Impacts
Previously Recorded Resources					
002050	2050H	-	Historic-period built resource: Southern Pacific Railroad alignment	Determined National Register ineligible; Potentially California Register eligible	No
008768	5560	-	Historic-period archaeological site: refuse scatter	Recommended not eligible	No
011740	6795H	-	Historic-period archaeological site: refuse scatter	Recommended not eligible	No
015933	8773H	-	Historic-period archaeological site: refuse scatter	Recommended not eligible	No
015934	8774H	-	Historic-period archaeological site: refuse scatter	Recommended not eligible	No
015935	8775H	-	Historic-period archaeological site: refuse scatter	Recommended not eligible	No
015937	8777H	-	Multicomponent archaeological site: historic-period refuse scatter and prehistoric debitage	Recommended not eligible	No
015938	8778H	-	Multicomponent archaeological site: historic-period refuse scatter and prehistoric debitage	Recommended not eligible	No
015941	8781H	-	Historic-period archaeological site: refuse scatter	Recommended not eligible	No
015942	8782	-	Prehistoric archaeological site: lithic scatter	Recommended not eligible	No
Newly Recorded Resources					
-	-	ESA-MMM-Site-001H	Historic-period archaeological site: refuse scatter	Recommended not eligible	No
-	-	ESA-MMM-Site-002H	Historic-period archaeological site: refuse scatter	Recommended not eligible	No
-	-	ESA-MMM-ISO-001P	Prehistoric isolate: one piece of debitage	Recommended not eligible	No

Historic-Period Built Resources

One historic-period built resource consisting of a segment of the Southern Pacific Railroad (P-15-002050) has been previously determined not eligible for listing in the National Register, but has not been evaluated for inclusion in the California Register (National Register Status Code 6Y). Because the resource has not been previously evaluated for inclusion in the California Register it has the potential to qualify as a historical resource pursuant to CEQA.

The railroad segment would not be subject to direct impacts as a result of Project Implementation. However, given the resource's proximity to the Project, indirect visual impacts may occur as a result of Project implementation.

In Kern County, the Southern Pacific Railroad alignment spans 115 miles within the San Joaquin Valley and the Antelope Valley, in addition to approximately 108 miles of branch railways within the Mojave Desert and Owens Valley. The railroad alignment passes through cities, towns, agricultural lands, rural landscapes, and industrial areas. The Project proposes construction of industrial facilities adjacent to an approximately 0.50-mile-long segment of the railroad,

accounting for approximately 0.2 percent of the overall length of the resource within Kern County.

Given that the Project would introduce industrial visual elements similar to those which already exist adjacent to other segments of the railroad alignment, and the relatively small portion (approximately 0.2 percent) of the railroad that would be subject to new visual elements, the visual changes to the resource as a result of Project implementation would be virtually imperceptible to the overall setting of the railroad's alignment within Kern County. Therefore, Project implementation would not result in indirect visual impacts to P-15-002050 and no additional impacts are anticipated.

Historic-Period Archaeological Sites

As part of the cultural resources survey conducted for the Project, seven previously unevaluated historic-period archaeological sites consisting of refuse scatters were identified: (P-15-008768, -015933, -015934, -015935, -015941, and ESA-MMM-Site-001H and -002H). Many of these are comprised of domestic refuse such as sanitary cans, hole-in-top cans, hole-in-cap cans, beverage bottle fragments, and tableware fragments. Based on the presence of diagnostic artifacts, it appears the refuse scatters largely date to the early to mid-20th century.

In general, it is difficult to associate isolated refuse scatters with specific individuals, families, homesteads, or agricultural operations. This is due in part to the nature of these types of resources, which are comprised of domestic trash typically deposited well away from domiciles and places of habitation. Review of the BLM's GLO records indicates the section within which the Project is located was patented to the Southern Pacific Railroad in the early 20th century and no homesteading occurred there. However, two adjacent early 20th century homesteads, the Faires and Bossaert homesteads, were located near the Project. Based on review of BLM's GLO records and the location of two nearby homesteads (the Faires and Bossaert homesteads), the refuse scatters may represent off-site dumping of domestic trash associated with the homesteads. However, this association is somewhat tenuous given that it is based on proximity only and there are no personal artifacts that definitively connect any of the refuse scatters to the two homesteads.

Further, given the section in which the Project is located was never homesteaded coupled with its rural nature and proximity to rural country roads, it may have been an ideal area for periodic roadside dumping. Many of the refuse are adjacent to Sopp Road and 10th Street West, and the two roads may have provided easy access for local families to periodically dump their refuse in the area. This appears to be a likely scenario given that during the survey evidence of modern dumping was evident in the form of large piles of tar roofing being present along 10th Street West.

Given the lack of clear associations with significant individuals or events, ESA recommends all seven previously unevaluated historic-period refuse scatters are not eligible for listing in the California Register under Criteria 1 and 2. Moreover, given that these are archaeological sites that lack architectural elements, ESA recommends these sites are not eligible for listing in the California Register under Criterion 3. Finally, given the surficial nature of these refuse scatters coupled with their lack of associations, their data potential has been exhausted as part of their

recordation. Therefore, ESA recommends these refuse scatters are not eligible for listing in the California Register under Criterion 4.

Moreover, based on the arguments provided above, these seven historic-period archaeological sites do not qualify as unique archaeological resources because they do not contain information needed to answer important scientific research questions, they have no special or particular quality such as being the oldest of its type or the best available example of its type, nor are they directly associated with a scientifically recognized important historic event or person.

Prehistoric Archaeological Sites

One prehistoric archaeological site, P-15-015942, was identified as a result of the SSJVIC records search and cultural resources survey. Based on the result of the current survey and XP1 investigation, the site is comprised of a sparse lithic scatter containing no subsurface deposits. The site does not contain data potential sufficient, such as datable material, diagnostic artifacts, or intact stratigraphy, to address regional research questions including but not limited to settlement and mobility, subsistence patterns, trade networks, and technology, and therefore is not eligible for listing in the California Register under Criterion 4. The site, being a sparse lithic scatter, is also not eligible for listing under California Register Criteria 1-3 as it demonstrates no association with events that have made a significant contribution to broad patterns in California history, has no association with important persons, nor does it embody the distinctive characteristics of a type, period, or region, or represent significant aesthetic or artistic value. Therefore, P-15-015942 does not qualify as a historical resource under CEQA.

Moreover, based on the argument provided above, this prehistoric archaeological site does not qualify as a unique archaeological resource because it does not contain information needed to answer important scientific research questions, it has no special or particular quality such as being the oldest of its type or the best available example of its type, nor is it directly associated with a scientifically recognized important prehistoric event or person.

Multicomponent Archaeological Sites

Two resources, P-15-015937 and -015938, are multicomponent archaeological sites consisting of historic-period refuse scatters and one piece of lithic debitage each. As discussed above, the refuse scatters are recommended not eligible for listing in the California Register due to a lack of clear associations and data potential. Therefore, the historic-period components of these two sites are both recommended not eligible based on the same reasoning.

The prehistoric components of these sites consist of one piece of lithic debitage at each site. These are isolated artifacts that lack clear cultural and chronological context. Therefore, the prehistoric components of these two sites are recommended not eligible for listing in the California Register.

Moreover, based on the arguments provided above, these two multicomponent archaeological sites do not qualify as unique archaeological resources because they do not contain information needed to answer important scientific research questions, they have no special and particular

quality such as being the oldest of its type or the best available example of its type, nor are they directly associated with a scientifically recognized important prehistoric or historic event or person.

Isolates

Resource ESA-MMM-ISO-001P is a newly recorded isolate. Due to the isolated nature and lack of clear cultural context, isolates are generally considered not to be significant resources. As such, ESA-MMM-ISO-001P is not recommended eligible for listing in the California Register.

Conclusions and Recommendations

Identified Resources

The cultural resources survey identified 13 (10 previously recorded and 3 newly recorded) cultural resources in the vicinity of the Project area. Of these 13 resources, one is a historic-period built environment resource (P-15-002050 [Southern Pacific Railroad]), eight are historic-period archaeological sites (P-15-008768 [refuse scatter], -011740 [refuse scatter], 015933 [refuse scatter], -015934 [refuse scatter], -015935 [refuse scatter], and -015941 [refuse scatter], and ESA-MMM-Site-001H [refuse scatter] and -002H [refuses scatter]), two are multicomponent archeological sites (P-15-015937 [refuse scatter and debitage], -15938 [refuse scatter and debitage]), one is a prehistoric archaeological site (P-15-015942 [lithic scatter]), and one is a prehistoric isolate (ESA-MMM-ISO-001P [one piece of debitage]). Twelve of these 13 resources are recommended not eligible for listing in the California Register and, therefore, do not qualify as historical resources. Nor do they qualify as unique archaeological resources under Public Resources Code 21803.2(g). One resource, P-15-002050 (Southern Pacific Railroad), may be eligible for listing in the California Register and, therefore, may qualify as a historical resource. However, this resource would not be subject to direct or indirect impacts as a result of Project implementation. Therefore, the Project would not result in significant impacts to known cultural resources that qualify as historical resources pursuant to CEQA.

Buried Resources

The subsurface archaeological sensitivity review indicates Holocene-age Quaternary alluvial deposits are mapped at surface within the Project area. These deposits encompass the entirety of human occupation within the western Mojave Desert, and are, therefore, of suitable age to preserve subsurface archaeological deposits. The soil types present in the Project area are sandy in composition and are derived from alluvial processes that, overtime, may cover previously surficial archaeological resources. Further, the Project vicinity appears to have seen a moderate degree of activity throughout the prehistoric period as indicated by the number of seasonal campsites, lithic scatters, and various other recently reported significant archaeological sites in the Project area's vicinity.

Based on these variables, the Project area has a moderate to high sensitivity for the presence of subsurface archaeological resources. Therefore, Project-related ground disturbing activities have the potential to encounter previously unknown subsurface archaeological resources that may

qualify as historical resources pursuant to CEQA. To reduce potentially significant impacts to previously unidentified archaeological resources that may qualify as historical resources or unique archaeological resources during Project construction, ESA recommends the following mitigation measure be implemented.

CUL-1: Retention of Qualified Archaeologist. Prior to the start of any ground disturbing activities, a qualified archaeologist, defined as an archaeologist meeting the Secretary of the Interior's Standards for professional archaeology (U.S. Department of the Interior 2008) shall be retained by the Applicant to carry out all mitigation measures related to cultural resources.

CUL-2: Cultural Resources Sensitivity Training. Prior to start of any ground-disturbing activities, the qualified archaeologist shall conduct cultural resources sensitivity training for all construction personnel associated with the Project. Construction personnel shall be informed of the types of cultural resources that may be encountered during construction, and of the proper procedures to be enacted in the event of an inadvertent discovery of archaeological resources or human remains. The Applicant shall ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance.

CUL-3: Construction Monitoring. An archaeological monitor (working under the direct supervision of the qualified archaeologist) and a Native American monitor shall observe all ground-disturbing activities, including but not limited to brush clearance, vegetation removal, grubbing, grading, and excavation. The qualified archaeologist, in coordination with the Applicant, County, and the Native American monitor(s), may reduce or discontinue monitoring if it is determined that the possibility of encountering buried archaeological deposits is low based on observations of soil stratigraphy or other factors. Archaeological monitoring shall be conducted by an archaeologist familiar with the types of archaeological resources that could be encountered within the Project. The Native American monitor shall be from a tribe that is culturally and geographically affiliated with the Project area. The archaeological and Native American monitor(s) shall be empowered to halt or redirect ground-disturbing activities away from the vicinity of a discovery until the qualified archaeologist has evaluated the discovery and determined appropriate treatment (as prescribed in Mitigation Measure CUL-4). The archaeological monitor shall keep daily logs detailing the types of activities and soils observed, and any discoveries. After monitoring has been completed, the qualified archaeologist shall prepare a monitoring report that details the results of monitoring. The report shall be submitted to the Applicant, County, and any Native American groups who request a copy. The qualified archaeologist shall submit a copy of the final report to the Southern San Joaquin Valley Information Center.

CUL-4: Unanticipated Discoveries. In the event of the unanticipated discovery of archaeological materials, all work shall immediately cease in the area (within approximately 100 feet) of the discovery until it can be evaluated by the qualified archaeologist. Construction shall not resume until the qualified archaeologist has conferred with the

Applicant, County, and the appropriate Native American representatives for prehistoric resources, on the significance of the resource.

If it is determined that the discovered archaeological resource constitutes a historical resource or a unique archaeological resource under CEQA, avoidance and preservation in place is the preferred manner of mitigation. Preservation in place may be accomplished by, but is not limited to, avoidance, incorporating the resource into open space, capping, or deeding the site into a permanent conservation easement. In the event that preservation in place is demonstrated to be infeasible and data recovery through excavation is the only feasible mitigation available, an Archaeological Resources Treatment Plan shall be prepared and implemented by the qualified archaeologist in consultation with the Applicant and the County that provides for the adequate recovery of the scientifically consequential information contained in the archaeological resource. The qualified archaeologist, Applicant, and County shall consult with appropriate Native American representatives in determining treatment for prehistoric or Native American resources to ensure cultural values ascribed to the resource, beyond those that are scientifically important, are considered.

CUL-5: Unanticipated Discovery of Human Remains and Associated Funerary Objects. In the event human remains and/or associated funerary objects are encountered during Project construction, all activity in the vicinity of the find shall cease (within 100 feet). Human remains discoveries shall be treated in accordance with and California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98, requiring assessment of the discovery by the County Coroner, assignment of a Most Likely Descendant by the California Native American Heritage Commission, and consultation between the Most Likely Descendant and the landowner regarding treatment of the discovery. Until the landowner has conferred with the Most Likely Descendant, the Applicant shall ensure that the immediate vicinity where the discovery occurred is not disturbed by further activity and that further activities take into account the possibility of multiple burials.

References

Ancestry.com. 2021. Online search engine for ancestry information. Available at Ancestry.com, accessed November 2021.

Bean, L. J., and C. R. Smith, “Serrano”, In *California*, edited by R. F. Heizer, pp. 570-574, Handbook of North American Indians, Vol. 8, W. C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C. 1978

Blackburn, Thomas C., and Lowell John Bean, “Kitanemuk”, In *California*, edited by R. F. Heizer, pp. 564-569, Handbook of North American Indians, Vol. 8, W. C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C., 1978

Boyd, William Harland. 2000. Kern County’s Desert Country: An Historical Overview. Kern County Historical Society. Bakersfield, CA, 2000.

Bureau of Land Management (BLM). 2021. General Land Office (GLO) Records, Digital Maps. Electronic resource, https://glorecords.blm.gov/default.aspx, accessed November 12, 2021.

California Geologic Survey (CGS). 2002. Note 36: California Geomorphic Provinces, revised December 2002.

California Office of Historic Preservation (OHP). 2012. Archaeological Determinations of Eligibility for Kern County. On file at the Southern San Joaquin Valley Information Center, California State University, Bakersfield.

Chandler, E., E. Denniston, and R. Cunningham. 2010a. Primary Record for P-15-015933. On file at the Southern San Joaquin Valley Information Center, California State University, Bakersfield.

_____. 2010b. Primary Record for P-15-015934. On file at the Southern San Joaquin Valley Information Center, California State University, Bakersfield.

_____. 2010c. Primary Record for P-15-015936. On file at the Southern San Joaquin Valley Information Center, California State University, Bakersfield.

_____. 2010d. Primary Record for P-15-015937. On file at the Southern San Joaquin Valley Information Center, California State University, Bakersfield.

_____. 2010e. Primary Record for P-15-015938. On file at the Southern San Joaquin Valley Information Center, California State University, Bakersfield.

_____. 2010f. Primary Record for P-15-015939. On file at the Southern San Joaquin Valley Information Center, California State University, Bakersfield.

_____. 2010g. Primary Record for P-15-015940. On file at the Southern San Joaquin Valley Information Center, California State University, Bakersfield.

_____. 2010h. Primary Record for P-15-015941. On file at the Southern San Joaquin Valley Information Center, California State University, Bakersfield.

_____. 2010i. Primary Record for P-15-015942. On file at the Southern San Joaquin Valley Information Center, California State University, Bakersfield.

_____. 2010j. Primary Record for P-15-015944. On file at the Southern San Joaquin Valley Information Center, California State University, Bakersfield.

_____. 2010k. Primary Record for P-15-015945. On file at the Southern San Joaquin Valley Information Center, California State University, Bakersfield.

_____. 2010l. Primary Record for P-15-015946. On file at the Southern San Joaquin Valley Information Center, California State University, Bakersfield.

_____. 2010m. Primary Record for P-15-015947. On file at the Southern San Joaquin Valley Information Center, California State University, Bakersfield.

_____.2010n. Primary Record for P-15-015948. On file at the Southern San Joaquin Valley Information Center, California State University, Bakersfield.

_____. 2010o. Primary Record for P-15-015949. On file at the Southern San Joaquin Valley Information Center, California State University, Bakersfield.

_____. 2010p. Primary Record for P-15-015950. On file at the Southern San Joaquin Valley Information Center, California State University, Bakersfield.

_____. 2010q. Primary Record for P-15-015951. On file at the Southern San Joaquin Valley Information Center, California State University, Bakersfield.

County of Los Angeles (COLA). 2012. Public Library, Antelope Valley. Frequently Asked Questions. Accessed at http://www.colapublib.org/history/antelopevalley/faq.html#q10, on December 7, 2012.

Cunningham, Robert, Martin Jorgensen, Martin Neinstedt, and Vince Parsick. Site Update for P-15-011740. On file at the Southern San Joaquin Valley Information Center, California State University, Bakersfield.

Denniston, E. and R. Cunningham. 2010. Primary Record for P-15-015935. On file at the Southern San Joaquin Valley Information Center, California State University, Bakersfield.

Dibblee, T.W., and J.A. Minch. 2008. Geologic Map of the Rosamond and Rogers Lake 15-minute quadrangles, Kern and Los Angeles Counties, California: Dibblee Geological Foundation Map DF-384: Scale 1:62,500.

Gardner, Jill. 2009. Population Regression or Aggregation? Changing Settlement Patterns in the Western Mojave Desert during the Medieval Climatic Anomaly, Proceedings of the Society for California Archaeology, Vol. 21, 2009.

Giambastiani, M., M. Hale, A. Kenney, M. Garnsey, L. Plaster, and A. Catacora. 2005. Primary Record for P-15-011777. On file at the Southern San Joaquin Valley Information Center, California State University, Bakersfield.

Glassbottlemarks.com. 2021a. *Thatcher Glass Manufacturing Company (c.1904-1985)*. Electronic resource, https://glassbottlemarks.com/thatcher-glass-manufacturing-company/, accessed June 27, 2021.

_____. 2021b. Alphabetical List of Glass Manufacturers' Marks on Bottles, Fruit Jars, Insulators, Tableware and other Glassware. Electronic resource, https://glassbottlemarks.com/bottlemarks/, accessed December 21, 2021.

Greene, Linda W. 1983. Historic Resource Study: A History of Land Use in Joshua Tree National Monument. Performed for Branch of Cultural Resources Alaska/Pacific Northwest/Western Team. U.S. Department of the Interior National Park Service.

Gudde, Erwin G. 1960. California Place Names: The Origin and Etymology of Current Geographical Names. Second Edition. University of California Press. Berkeley, California.

Hale, Micah, Aaron Kenney, Michael Gamsey, Scott Wolf, Dave Iverson, and Andrea Catacora. 2005. Primary Record for P-15-011740. On file at the Southern San Joaquin Information Center, California State University Bakersfield.

Intermountain Antiquities Computer System (IMACS). 2001. IMACS User Guide, University of Utah, Department of Anthropology.

Jones, B., C. Bouscaren, S. Hogan-Conrad, T. Reece, and A. Arnett, K. 2003. Site Record for P-15-005877. On file at the Southern San Joaquin Valley Information Center, California State University, Bakersfield.

Kroeber, A. L., *Handbook of the Indians of California*, Bulletin of the Bureau of American Ethnology, Smithsonian Institution, Volume 78, Washington, D.C., 1925

Lanford, Steve and Robin Mills. 2006. HILLS BROS. Coffee Can Chronology: Field Guide. BLM- Alaska Open File Report 109. U.S. Department of the Interior, Bureau of Land Management, Fairbanks, Alaska.

Lockhart. Bill. 2004.The Dating Game: Owens-Illinois Glass Co. In *Bottles and Extras, Summer 2004*.

Lyon, Sarah. n.d. Museum Monday: Log Cabin Syrup. Electronic resource, https://blackrockdesert.org/museum-monday-log-cabin-syrup/, accessed November 24, 2021.

MJB. 2021. History Because Tradition Matters. Electronic resource, https://www.mjbcoffee.com/history/, accessed November 24, 2021.

Natural Resources Conservation Service (NRCS). 2021a. Cajon Loamy Sand. Electronic resource, https://websoilsurvey.sc.egov.usda.gov/WssProduct/io4wpjzktlssuupez4q1giz4/io4wpjzktlssuupez4q1giz4/20211202_13220701106_1_Map_Unit_Description_Cajon_loamy_sand_0_to_5_percent_slopes--Edwards_Air_Force_Base_California_Parts_of_.pdf, accessed December 1, 2021.

_____. 2021b. Desatzo Loamy Sand, Electronic resource, https://websoilsurvey.sc.egov.usda.gov/WssProduct/io4wpjzktlssuupez4q1giz4/io4wpjzktlssuupez4q1giz4/20211202_13225101512_1_Map_Unit_Description_DeStazo_sandy_loam_0_to_2_percent_slopes--Edwards_Air_Force_Base_California_Parts_o.pdf, accessed December 1, 2021.

_____.2021c. Garlock Loamy Sand. Electronic resource, https://websoilsurvey.sc.egov.usda.gov/WssProduct/io4wpjzktlssuupez4q1giz4/io4wpjzktlssuupez4q1giz4/20211202_13232601911_19_Map_Unit_Description_Garlock_loamy_sand_2_to_9_percent_slopes--Edwards_Air_Force_Base_California_Parts_.pdf, accessed December 1, 2021.

Norton, W.L. 1998. Primary Record for P-15-008768. On file at the Southern San Joaquin Information Center, California State University, Bakersfield.

O'Brien, T. and C. Thomas. 2000. Primary Record for P-15-010171. On file at the Southern San Joaquin Valley Information Center, California State University, Bakersfield.

Price, Barry, Alan G. Gold, Barbara S. Tejada, David D. Earle, Suzanne Griset, Jay B. Lloyd, Mary Baloian, Nancy Valente, Virginia S. Popper, and Liza Anderson. 2008. The

Archaeology of CA-LAN-192: Lovejoy Springs and Western Mojave Desert Prehistory. Prepared by Applied Earthworks for the County of Los Angeles, September, 2008

Society for Historical Archaeology (SHA). 2020. Bottle and Glass Colors. Electronic resource, https://sha.org/bottle/colors.htm, access November 24, 2021.

_____. 2021. Bottle Bases: Owens Machine Suction Marks. Electronic resource, https://sha.org/bottle/bases.htm, accessed November 24, 2021.

Sutton, Mark Q. 1988. An Introduction to the Archaeology of the Western Mojave Desert, California, Archives of California Prehistory No. 14, Coyote Press, Salinas, California, 1988.

———. 1996. The Current Status of Archaeological Research in the Mojave Desert, Journal of California and Great Basin, Vol. 18, No. 2, pp. 221-249, 1996.

Sutton, Mark Q., Mark E. Basgall, Jill K. Gardner, and Mark W. Allen. 2007. Advances in understanding Mojave Desert Prehistory, in California Prehistory: Colonization, Culture, and Complexity, edited by Terry L. Jones and Kathryn A. Klar, pp 229-245, 2007.

Toulouse, Julian Harrison. 1972. *Bottle Makers and Their Marks*, Thomas Nelson Inc., New York.

Troxel, Bennie W., and Paul K. Morton. 1962. Mines and Mineral Resources of Kern County, California, County. Report 1. California Division of Mines and Geology. Sacramento, California.

Warren, C. N. 1984. The Desert Region, In California Archaeology, Coyote Press, Salinas, California, 1984.

Way, K. Ross. 2009. Preliminary Results of Data Recovery from the Bean Spring Site, CA-KER-2821/H, Kern County, California. Paper presented at the Annual Meeting of the Society for California Archaeology, Modesto, March 14, 2009.

APPENDIX A
Personnel



Monica Strauss, RPA

Director, Southern California Cultural Resources Group

EDUCATION

MA, Archaeology, California State University, Northridge

BA, Anthropology, California State University, Northridge

AA, Humanities, Los Angeles Pierce College

25 YEARS OF EXPERIENCE

CERTIFICATION/ REGISTRATION

Register of Professional Archaeologists (RPA), #12805

SPECIALIZED QUALIFICATIONS

CA State BLM Permitted

Meets Secretary of the Interior's PQS: Archaeology and History

Meets Caltrans PQS for Principal Investigator

NV State BLM Permitted Eligible (specific geographies)

PROFESSIONAL AFFILIATIONS

Society for California Archaeology (SCA)

Society for American Archaeology (SAA)

Monica provides senior oversight to a multi-disciplinary team of cultural resources specialists throughout Southern California, including archaeologists, architectural historians, historians, and paleontologists. During her 25 years of practice, she has successfully directed hundreds of cultural resources projects meeting local, state, and/or federal regulatory requirements. Monica's strength lies in assisting clients in navigating complex cultural resources issues in the contexts of the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), and Section 106 of the National Historic Preservation Act (NHPA). She directs and oversees staff on Phase I archaeological/paleontological and historic architectural surveys, construction monitoring, Native American outreach, archaeological testing and treatment, historic resource significance evaluations, and large-scale data recovery programs.

Monica's experience ranges from large infrastructure projects that are controversial and multi-jurisdictional to smaller development projects that are important to local agencies and stakeholders. She excels at working with agencies to develop creative mitigation solutions to address challenging cultural resources impacts, and has cultivated and maintained solid relationships with agency staff, regularly working with them to develop creative mitigation to address challenging cultural resources impacts. Relative to Tribal cultural resources, she has excellent relationships with local Tribal representatives, is an expert in the area of Assembly Bill 52, and routinely provides training to her clients and through industry workshops. Monica has also served as a workshop content author and session presenter for the Association of Environmental Professionals on the topic.

Relevant Experience

BLM Red Mountain Abandoned Mine Lands Project, Kern and San Bernardino Counties, CA. *Principal Investigator*: ESA was retained by the Bureau of Land Management, Ridgecrest Field Office to conduct a Class III Archaeological Resources Inventory for the Red Mountain Abandoned Mine Lands projects. The projects include the remediation of physical safety hazards associated with a number of abandoned mining features in the vicinity of Red Mountain and would ensure public safety by preventing public exposure to the dangers associated with abandoned mine features. Monica oversaw the team conducting cultural resources studies for the BLM.

BLM Bakersfield Abandoned Mine Lands Project, Kern County, CA. *Principal Investigator*: ESA was retained by the Bureau of Land Management, Bakersfield Field Office to conduct a Class III Archaeological Resources Inventory for the Cowboy/Gold Peak, Juan Dos, and Caliente Creek Abandoned Mine Lands projects. The projects would include the remediation of physical safety hazards associated with abandoned mining features would ensure public safety by preventing public exposure to the dangers associated with abandoned mine

features. Monica oversaw the team conducting cultural resources studies for the BLM.

Bureau of Land Management (BLM), Lakeside and Ridgecrest Abandoned Mine Lands Archaeological Inventory, San Diego and Kern Counties, CA. *Cultural Resources Principal Investigator.* ESA has been retained to provide cultural resources services to the Bureau of Land Management (BLM) in connection with the Abandoned Mine Lands program. The BLM proposes to conduct remediation of physical safety hazards associated with Abandoned Mine Lands. Remediation would consist of backfilling or closing off mine shafts, adits, and prospects. ESA prepared archaeological inventory reports documenting the abandoned mines, in compliance with Section 106 of the NHPA. Monica provided oversight of all cultural resources work.

Antelope Valley Water Bank Initial Recharge and Recovery Facility Improvement, Kern County, CA. *Cultural Resources Principal Investigator*. ESA was retained by GEI Consultants, Inc. to conduct a Phase I Archaeological Resources Assessment in connection with a groundwater banking project designed to provide up to 500,000-acre-feet of total surface water storage capacity underground in a partially depleted aquifer. The project is being carried out by the Antelope Valley East Kern Water Agency with the assistance of a Challenge Grant from the Bureau of Reclamation. Monica directed archaeologists who conducted archival research, pedestrian survey, and Native American outreach to identify the presence of archaeological resources. A technical report was prepared to meet CEQA and Section 106 compliance requirements.

West Kern Water District, Groundwater Recharge Project EIR, Kern County, CA. *Cultural Resources Principal Investigator.* Monica managed a Phase I archaeological resources survey of a 500-acre Project area proposed for groundwater recharge basins and a nine-mile pipeline in Kern County. The Project was carried out in compliance with CEQA and Section 106 of the NHPA. The survey resulted in the identification of over 20 archaeological sites. She managed the preparation of a Phase I Archaeological Resources Survey Report and Cultural Resources EIR Section that addressed the potential for site eligibility and provided an impacts analysis and mitigation measures.

Bureau of Land Management (BLM), Lakeside and Ridgecrest Abandoned Mine Lands Archaeological Inventory, San Diego and Kern Counties, CA. *Cultural Resources Principal Investigator.* ESA has been retained to provide cultural resources services to the Bureau of Land Management (BLM) in connection with the Abandoned Mine Lands program. The BLM proposes to conduct remediation of physical safety hazards associated with Abandoned Mine Lands. Remediation would consist of backfilling or closing off mine shafts, adits, and prospects. ESA prepared archaeological inventory reports documenting the abandoned mines, in compliance with Section 106 of the NHPA.



Michael Vader

Principal Cultural Resources Specialist

EDUCATION

BA, Physical Anthropology, University of California, Santa Barbara

MA, Applied Archaeology (In Progress), California State University San Bernardino

15 YEARS OF EXPERIENCE

PROFESSIONAL AFFILIATIONS

Society for California Archaeology (SCA)

Society for American Archaeology (SAA)

Pacific Coast Archaeological Society (PCAS)

SPECIALIZED EXPERIENCE

Analysis of faunal remains including fish and shellfish species

Archaeological Monitoring

Paleontological Monitoring

Environmental Compliance Monitoring

Human osteology and bioarchaeology

Michael is cultural resources specialist with experience working on survey, data recovery, and monitoring projects. Michael has experience with project management, has led crews on multiple surveys and excavations, and is familiar with environmental compliance documents. He has worked on a variety of energy and water infrastructure projects throughout California, including projects in Riverside, San Diego, Imperial, San Bernardino, Los Angeles, Orange, Santa Barbara, San Luis Obispo, Kern, Fresno, Madera, and Inyo Counties, as well as in Clark County Nevada. Michael regularly works as part of a team, coordinating with field staff and agency leads.

Relevant Experience

Sterling Natural Resources Center Weaver Basins Project, Highalnd, CA. *Archaeologist.* The East Valley Water District retained ESA to prepare a Historic Property Identification Report for the proposed Sterling Natural Resources Center Weaver Basins Project in support of funding under the State Water Resources Control Board's State Revolving Fund Program. The Project proposes the construction of recharge basins, the off specification water emergency basin, and a regional recycled water pipeline to allow reclaimed water from the existing Sterling Natural Resource Center to infiltrate into the underlying soils and recharge the Bunker Hill Groundwater Basin. Michael led the cultural reosurces survey and Exnted Phase I field work, and prepared the Historic Properties Idenification Report pursuant to State Water Resources Control Board guidelines.

MFRO Facility for Agriculture Project, City of Escondido, CA. *Archaeologist.* The City of Escondido retained ESA to conduct Extended Phase I testing for the Membrane Filtration/Reverse Osmosis (MFRO) Facility for Agriculture Project at the request of the State Water Resources Control Board (SWRCB) to obtain funding from the State Revolving Fund. The project includes construction of an MFRO facility to provide advanced treatment for Title 22 quality reuse water for agricultural use. Michael prepared the Extended Phase I work plan, conducted the Extended Phase I excavations, and completed the Extended Phase I report.

Palmdale Water District 2016 Water System Master Plan – ES-03 Extended Phase I Archaeological Investigation Project, Los Angeles County, CA. *Archaeologist.* Environmental Science Associates conducted an Extended Phase 1 Archaeological Investigation for the ES-03 project, which is being proposed as part of the larger Palmdale Water District (PWD) 2016 Water System Master Plan (WSMP). The WSMP would construct water system improvements throughout the PWD service area in order to meet potable water system needs. The ES-03 project would consist of the construction of 154-foot diameter water storage tank and associated pipeline. Michael authored the Extended Phase I work plan and report.

BLM Bakersfield Abandoned Mine Lands Project, Kern County, CA. *Archaeologist.* ESA was retained by the Bureau of Land Management, Bakersfield Field Office to conduct a Class III Archaeological Resources Inventory for the Cowboy/Gold Peak, Juan Dos, and Caliente Creek Abandoned Mine Lands projects. The projects would include the remediation of physical safety hazards associated with abandoned mining features would ensure public safety by preventing public exposure to the dangers associated with abandoned mine features. Michael was the field director for the survey and prepared the Class III Archaeological Resources Inventory Report.

Ballona Wetlands Ecological Reserve Restoration Project, Los Angeles, CA. *Archaeologist.* The California State Coastal Conservancy retained ESA to conduct an Extended Phase I investigation at 20 previously recorded shell scatters and Phase II archaeological testing of four historic-period archaeological sites in support of an Environmental Impact Statement/Environmental Impacts Report being prepared for the proposed Ballona Ecological Reserve Restoration Plan Project which would restore native coastal wetland and upland habitats within the 600-acre Ballona Wetlands Ecological Reserve. Michael led the extended Phase I and Phase II fieldwork and assisted in the preparation of the technical report presenting the results and conclusions of the study.

City of Los Angeles Department of Water and Power, Barren Ridge Switching Station, Kern County, CA. *Archaeologist.* ESA has prepared a Phase I cultural resources study for the Los Angeles Department of Water and Power Barren Ridge Switching Station Project, located in Kern County, CA. The proposed project includes the expansion of the existing Barren Ridge Switching Station. The expansion would consist of the development of 3.7-acres of undeveloped land on the east side of the switching station. Michael led the cultural resources survey and prepared the technical report for the study.

California Department of Water Resources, Pearblossom Solar Project, Los Angeles County, CA. *Archaeologist.* ESA archaeologists have prepared a Phase I cultural resource study and an IS/MND in support of the California Department of Water Resources' Pearblossom Solar Project located in Antelope Valley, Los Angeles County, CA. The project includes the installation of photovoltaic solar panels on approximately 70-acres of land within the Pearblossom Pumping Plant. The solar panels would generate approximately 10 megawatts of energy which would be transmitted to Southern California Edison via a nearby 230-kilovolt radial distribution line. Michael led the Phase I cultural resources survey and contributed to the technical report and IS/MND.



Matheson Lowe

Senior Environmental Field Technician

EDUCATION

BA with Honors, Anthropology, (Archaeology emphasis), University of Arizona

9 YEARS OF EXPERIENCE

PROFESSIONAL AFFILIATIONS

Society for California Archaeology (SCA)

TRAINING

GPS (Trimble) Operation

Noise Trained

Compliance Trained

Paleontology Training, wet and dry screening

Geology, sedimentation and depositional erosion training

Bio-archaeology field recovery, site mapping

Human and Fauna osteology, basic field botany

SKILLS

First Aid/CPR certified

Matheson (Mat) Lowe is a senior cultural resources specialist. He has worked in archaeology and cultural resource management for the last nine years throughout the Greater Los Angeles area, Great Basin, Mojave Desert and Sierra Nevada Mountains, coastal regions, urban landscapes and the greater western United States. Working in a variety of environments, Matheson's field experience involves identifying prehistoric and historic cultural resources and recognizing geological formations and paleontological specimens. He has participated in large- and small-scale Phase I-III pedestrian surveys and excavations involving historic built environment and osteology. He also has extensive experience working with construction monitoring, including: mass land grading, urban mass excavation, utility trenching, site management communication, and environmental, safety and archaeological training for staff and crews. His expertise also includes site mapping, in-field historic resource analysis, and assisting in the completion of technical reports and DPR forms.

Relevant Experience

Palmdale Water District Potable Water Supply Master Plan Testing, Palmdale, CA. *Archaeologist.* Matheson performed a Phase II testing of a proposed pipeline route for a PWD water supply pipeline project. The project area included on known historic site that was re-evaluated during the Phase I survey work. Matheson's primary duties included excavating shovel test pits and screening back dirt from mechanical trenching, in addition to general field paper work management.

Arrowhead Springs, Highland, San Bernardino County, CA. *Archaeologist.* Alongside a crew of four, Matheson performed Intensive Pedestrian Survey at the request of the San Manuel Tribal Band of Indians to acquire cultural data of surface deposit artifacts or features that might exist adjacent to previously recorded sites or new discoveries on parcels of BLM, U.S. Forestry or private lands which would be used in a land parcel trade between this agency bodies. Some of the proposed survey included difficult to access terrain or required a technical approach to access, which fell to Matheson and one other technician to survey, as safety dictated. In addition to all the assumed tasks of pedestrian survey, Matheson also maintained photo logs and inputted GIS data with a Trimble unit.

Paradise Camp Soil Remediation Project, Bishop, CA. *Archaeologist.* Mat performed cultural resource monitoring as the lead monitor, coordinated with the project manager, construction manager and worked closely with the Tribal monitor to coordinate full coverage of ground disturbances. The project involved the removal of toxic lead metal materials and contaminated soils related to a historic dump site dating from the 1900's to present by means of 'surgical excavation'. Matheson also provided the cultural resource training for the remediation crew and representatives of Los Angeles Department of Water

and Power present to oversee the work. Mat was also able to contribute sections to the final ESA report.

I-40 Regrade Project, Lebec to Newberry Springs, CA. *Archaeologist.* Mat served as surveyor crew member for a survey along the Interstate 40 center median and select portions of rest areas along the highway. The survey extended from Newberry Springs to Lebec, California. This work included maintaining the photographic log for the survey, navigation via printed field maps and recording survey landforms and soil conditions. Matheson's duties also involved any various site recording tasks. The project concerned the regrading and expansion of the I-40 traffic corridor in order to improved driver and highway safety.

Hellhole Canyon Phase I Inventory Survey Project, San Diego, CA. *Archaeologist.* The purpose of this project is create an inventory and site updates to previously recorded finds in the Hellhole Canyon Preserve Matheson performed as surveyor and assisted in site recording the preserve near Escondido, California. This work included maintaining the photographic log for the survey, navigation via printed field maps and recording survey landforms, soil conditions and any new discoveries. Matheson's duties also involved any various site recording tasks, systematic and intuitive survey methods based on difficult terrain.

Driftwood Solar Survey Project, Buttonwillow, CA. *Archaeologist.* Matheson performed as surveyor and co-field director for the survey consisting of 2,200-acre area from privately owned almond orchards. This work included pre-survey planning and logistics, researching past and current site reports for previously recorded sites in and adjacent to the project area, executing the survey in collaboration with field director and project manager and recording new and previously recorded sites within the project area. In addition to fieldwork duties, Mat was also responsible for the well-being of the crew, surveying in 100-degree weather and high mileage survey days.

Weaver Basins Extended Phase One Testing, Highland, CA. *Archaeologist, Deputy Field Director*: Matheson participated and supervised Extended Phase One mechanical testing operations for the East Valley Water Municipality. Duties included maintaining field data, managing a crew of one ESA intern and one heavy equipment operator, and co-authorship of the final report.

Miranda Rodriguez

Cultural Resource Specialist I

EDUCATION

BA, Anthropology, Minor, Classical Studies. University of California, San Diego

1 YEARS' EXPERIENCE

SPECIALIZED EXPERIENCE

Prehistoric Archaeology

Bronze Age and Classical Archaeology

Miranda is a cultural resources specialist with experience working on survey, data recovery, and Extended Phase 1 Excavations. Miranda routinely assists in field work, archival research, resource documentation, and reporting. She regularly works as part of a team.

Relevant Experience

Mojave Micro Mill Project, Kern County, CA. *Archaeologist.* Environmental Science Associates has been retained by the Pacific Steel Group, to prepare a Phase I Cultural Resources Assessment for the Mojave Micro Mill Project in support of an Environmental Impact Report being prepared pursuant to the California Environmental Quality Act. The Project proposes the construct and operate a micro mill facility and associated infrastructure necessary to produce reinforcing bar from scrap metal various recycling processes. Kern County is the leady agency pursuant to CEQA. Miranda assisted in the Phase I survey and archival.

Hellhole Canyon Preserve Fureigh Addition, San Diego County, CA. *Archaeologist.* Environment Science Associates was retained by the County of San Diego Department of Parks and Recreation to conduct a cultural resources assessment of the Hellhole Canyon Preserve Fureigh Addition. The Fureigh Addition was added to the overall 2,599-acre Hellhole Canyon Preserve in 2019, and ESA conducted the cultural resources surveys to identify the presence of cultural resources within the addition. Miranda assisted with cultural resources survey and assessment of inventory.

East Otay Trail Alignment Study Project, Otay Mesa, CA. *Archaeologist.* Environmental Science Associates has been retained by the County of San Diego Department of Parks and Recreation to conduct a cultural resources assessment for East Otay Trail Alignment Study Project in support of an Environmental Impact Report being prepared pursuant to the California Environmental Quality Act. The Project proposes the designation of approximately 80.5 linear miles of trails and pathways in southeastern San Diego County to connect the communities of Eastlake, Otay Ranch, Rolling Hills Ranch, Bella Lago, San Miguel Ranch, and Jamul, as well as provide connections to preserved areas and regional trails. Miranda assisted with the archival research, the cultural resources survey, and the reporting.

Sterling Natural Resources Center Weaver Basins Project, Highland, CA. *Archaeologist.* Environmental Science Associates has been retained by the East Valley Water District to conduct an Extended Phase I Investigation and Phase II Evaluation in support of the Sterling Natural Resources Center (SNRC) Weaver Basins Project. The Project proposes the construction of recharge basins, the off specification water emergency basin, and a regional recycled water pipeline to allow reclaimed water from the existing SNRC to infiltrate into the underlying

soils and recharge the Bunker Hill Groundwater Basin. Miranda assisted with the extended Phase I investigations.

Mabury/Santiago Trails Project, Orange, CA. *Archaeologist.* Environmental Science Associates has been retained by Milan REI X, LLC. to conduct a Phase I and II cultural resources assessments of the Project's Area of Potential Effects (APE) in accordance with Section 106 of the NHPA. The Phase I assessment included a cultural resources records search through the South Central Coastal Information Center (SCCIC), a Sacred Lands File (SLF) search through the Native American Heritage Commission (NAHC), a pedestrian survey, and other archival research. The phase II assessment resulted in a lack of cultural material from the current and previous investigations. Given the poor integrity of the site, CA-ORA-369 is recommended as ineligible for listing in the National Register. Miranda assisted in Phase II investigations.

1101 Marine Drive Residential Project 2021, Laguna Beach, CA. *Archaeologist.* Environmental Science Associates has been retained by Laguna Cove, LLC to conduct a Phase I and Phase II Cultural Resources Assessment for the 1101 Marine Drive Project, to identify and evaluate the potential impacts to cultural resources associated with the Project for the purpose of complying with the California Environmental Quality Act (CEQA). The Project proposes to redevelop the 2.28-acre property at 1101 Marine Drive (Project Site), located in the City of Laguna Beach. The assessment also included an impact analysis and recommended mitigation measures, to reduce potentially significant impacts to cultural resources under CEQA. Miranda assisted in sorting through the data collected at the site.

31451 Coast Highway Residential Project, Laguna Beach, 2021: *Archaeologist.* Environmental Science Associates has been retained to conduct an Extended Phase I and Phase II Cultural Resources Assessment for the 31451 Coast Highway Project (Project), to identify and evaluate the potential impacts to cultural resources associated, to comply with the California Environmental Quality Act (CEQA). The Project would include the construction of a three-story, split-level single family residence on an approximately 0.56-acre vacant ocean front lot (Project Site) in Laguna Beach, California. The assessment included an impact analysis and recommended mitigation measures to reduce potentially significant impacts to cultural resources under CEQA. The results of ESA's Extended Phase I and II Assessment has revealed that resource CA-ORA-842 (West Locus) is composed of a multi-component prehistoric archaeological site, that consists of a well-developed prehistoric shell midden deposit. As a result, CA-ORA-842 qualifies as a historical resource under CEQA. Miranda assisted in the wet screening of shell midden.

APPENDIX B (CONFIDENTIAL – NOT FOR PUBLICATION)

SSJVIC Records Search Results

APPENDIX C

Sacred Lands File Search

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

SECRETARY
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NAHC.ca.gov

April 7, 2021

Fatima Clark

ESA Cultural Resources

Via Email to: FClark@esassoc.com

Re: Mojave Micro Mill Project, Kern County

Dear Ms. Clark:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Nancy.Gonzalez-Lopez@nahc.ca.gov.

Sincerely,

Nancy Gonzalez-Lopez
Cultural Resources Analyst

Attachment

APPENDIX D (CONFIDENTIAL – NOT FOR PUBLICATION)

DPR 523 Forms

APPENDIX E (CONFIDENTIAL – NOT FOR PUBLICATION)

Resource Location Map

APPENDIX F (CONFIDENTIAL – NOT FOR PUBLICATION)

Extended Phase I Investigation Results

APPENDIX G
Hand Auger Bore Field Forms

ESA

Cultural Resources Group
626 Wilshire Boulevard, Suite 1100 • Los Angeles, CA 90017 • 213-599-4300

Date: 12/13/21

Project: Mojave Micro Mill Phase/Task: XP1

HAND AUGER BORE (HAB) FORM

Site Name/ No.: P15015942 Crew/Recorder(s): Miranda Rodriguez

HAB Number: 1 HAB size (cm diameter): 10 Screen size: ¼ (⅛) other: _____

HAB Level (i.e., 0-10cm)	Description of HAB Level Cultural Constituents/ Notes	Matrix/ Soil Description	Bag #
0 – 20cm	n/A	Yellow brown fine silt soil with >1 cm diameter	N/A
0-20cm			

ESA

Cultural Resources Group
626 Wilshire Boulevard, Suite 1100 • Los Angeles, CA 90017 • 213-599-4300

Date: _____

Project: Mojave Micro Mill Phase/Task: XP1

HAND AUGER BORE (HAB) FORM

Site Name/ No.: P-15-015942 Crew/Recorder(s): M. Vader

HAB Number: 2 HAB size (cm diameter): 10 Screen size: ¼ (⅛) other: _____

HAB Level (i.e., 0-10cm)	Description of HAB Level Cultural Constituents/ Notes	Matrix/ Soil Description	Bag #
0-20	N/A	Loose yellow brown fine silt w/ >1 to 1cm dia gravel	
20-40	N/A	"	

ESA

Date: 12/13/21

Cultural Resources Group
626 Wilshire Boulevard, Suite 1100 • Los Angeles, CA 90017 • 213-599-4300

Project: Mojave Micro Mill Phase/Task: XPI

HAND AUGER BORE (HAB) FORM

Site Name/ No.: P-15-015942 Crew/Recorder(s): N. Vader

HAB Number: 3 HAB size (cm diameter): 10 cm Screen size: ¼ (⅛) other: _____

HAB Level (i.e., 0-10cm)	Description of HAB Level Cultural Constituents/ Notes	Matrix/ Soil Description	Bag #
0-20	N/A	Loose Yellowish Brown Fine Silt w/ 7/-1cm Dia Gravel	
20-40	N/A	" "	

ESA

Cultural Resources Group
626 Wilshire Boulevard, Suite 1100 • Los Angeles, CA 90017 • 213-599-4300

Date: 12/13/21

Project: MAINE MICRO MILL Phase/Task: XP1

HAND AUGER BORE (HAB) FORM

Site Name/ No.: P-15-015492 Crew/Recorder(s): M. VADA

HAB Number: 4 HAB size (cm diameter): 10cm Screen size: ¼ (⅛) other: _____

HAB Level (i.e., 0-10cm)	Description of HAB Level Cultural Constituents/ Notes	Matrix/ Soil Description	Bag #
0-20	N/A	LOOSE YELLOWISH BROWN FINE SILT W/ <1-1cm DIA GRAVEL	N/A
20-40	N/A	" "	N/A

ESA

Cultural Resources Group
626 Wilshire Boulevard, Suite 1100 • Los Angeles, CA 90017 • 213-599-4300

Date: 12/13/21

Project: Mojave Micro Mill Phase/Task: XP1

HAND AUGER BORE (HAB) FORM

Site Name/ No.: P15OR942 Crew/Recorder(s): Miranda Rodriguez

HAB Number: 5 HAB size (cm diameter): 1.0 Screen size: ¼ (⅛) other: _____

HAB Level (i.e., 0-10cm)	Description of HAB Level Cultural Constituents/ Notes	Matrix/ Soil Description	Bag #
0-20 cm	N/A	loose yellow brown fine grain silt w/ > 1 cm diameter	N/A

ESA

Cultural Resources Group
626 Wilshire Boulevard, Suite 1100 • Los Angeles, CA 90017 • 213-599-4300

Date: 12/13/21

Project: Mojave Micro Mill Phase/Task: XP1

HAND AUGER BORE (HAB) FORM

Site Name/ No.: P15015942 Crew/Recorder(s): Miranda Rodriguez

HAB Number: 6 HAB size (cm diameter): 10 Screen size: ¼ (⅛) other: _____

HAB Level (i.e., 0-10cm)	Description of HAB Level Cultural Constituents/ Notes	Matrix/ Soil Description	Bag #
0-20 cm	N/A	loose yellow brown fine silt soil w/ > 1 cm diameter	N/A

ESA

Cultural Resources Group
626 Wilshire Boulevard, Suite 1100 • Los Angeles, CA 90017 • 213-599-4300

Date: 12/13/21

Project: Mojave Micro Mill Phase/Task: XRF

HAND AUGER BORE (HAB) FORM

Site Name/ No.: P15015942 Crew/Recorder(s): Miranda Rodriguez

HAB Number: 7 HAB size (cm diameter): 10 Screen size: ¼ (⅛) other: _____

HAB Level (i.e., 0-10cm)	Description of HAB Level Cultural Constituents/ Notes	Matrix/ Soil Description	Bag #
0-20 cm	N/A	loose fine grain soil, yellow-brownish w/ > 1 cm diameter	N/A

ESA

Cultural Resources Group
626 Wilshire Boulevard, Suite 1100 • Los Angeles, CA 90017 • 213-599-4300

Date: 12/13/21

Project: Mojave Micro Mix Phase/Task: XP1

HAND AUGER BORE (HAB) FORM

Site Name/ No.: P-15-015942 Crew/Recorder(s): MVADER

HAB Number: 8 HAB size (cm diameter): 10cm Screen size: ¼ (1/8) other: _____

HAB Level (i.e., 0-10cm)	Description of HAB Level Cultural Constituents/ Notes	Matrix/ Soil Description	Bag #
0-20	N/A	LOOSE YELLOW BROWN FINE SILT W/ <1-/cm GRAVEL	N/A
20-40	N/A	" "	N/A

ESA

Cultural Resources Group
626 Wilshire Boulevard, Suite 1100 • Los Angeles, CA 90017 • 213-599-4300

Date: 12/13/21

Project: MOSNE MICRO MILL Phase/Task: XP1

HAND AUGER BORE (HAB) FORM

Site Name/ No.: P-15-015942 Crew/Recorder(s): M. Vidor

HAB Number: 9 HAB size (cm diameter): 10 cm Screen size: ¼ (⅛) other: _____

HAB Level (i.e., 0-10cm)	Description of HAB Level Cultural Constituents/ Notes	Matrix/ Soil Description	Bag #
0-20	N/A	LOOSE YELLOW BROWN FINE SILT W/ <1-1cm DIA GRAVEL	N/A
20-40	N/A	" "	N/A

ESA

Cultural Resources Group
626 Wilshire Boulevard, Suite 1100 • Los Angeles, CA 90017 • 213-599-4300

Date: 12/13/21

Project: Mojave Micro Mill Phase/Task: KP1

HAND AUGER BORE (HAB) FORM

Site Name/ No.: P15015942 Crew/Recorder(s): Miranda Rodríguez

HAB Number: 10 HAB size (cm diameter): 10 Screen size: ¼ (⅛) other: _____

HAB Level (i.e., 0-10cm)	Description of HAB Level Cultural Constituents/ Notes	Matrix/ Soil Description	Bag #
0-20cm	N/A	loose yellow brown fine grain silt soil > 1 cm diameter	N/A

ESA

Cultural Resources Group
626 Wilshire Boulevard, Suite 1100 • Los Angeles, CA 90017 • 213-599-4300

Date: 12/13/21

Project: Mojave Micro Mill Phase/Task: TP1

HAND AUGER BORE (HAB) FORM

Site Name/ No.: P15015942 Crew/Recorder(s): Miranda Rodriguez

HAB Number: 11 HAB size (cm diameter): 10 Screen size: ¼ (⅛) other: _____

HAB Level (i.e., 0-10cm)	Description of HAB Level Cultural Constituents/ Notes	Matrix/ Soil Description	Bag #
0-20cm	N/A	loose yellow brown fine grained silt soil w/ >1cm diameter	N/A

ESA

Date: 12/3/21

Cultural Resources Group
626 Wilshire Boulevard, Suite 1100 • Los Angeles, CA 90017 • 213-599-4300

Project: Mojave Micro Mill **Phase/Task:** XP1

HAND AUGER BORE (HAB) FORM

Site Name/ No.: P-15-015942 **Crew/Recorder(s):** M. Vader

HAB Number: 12 **HAB size (cm diameter):** 10cm **Screen size:** ¼ (⅛) other: _____

HAB Level (i.e., 0-10cm)	Description of HAB Level Cultural Constituents/ Notes	Matrix/ Soil Description	Bag #
0-20	N/A	Loose Yellow Brown Fine Silt w/ <1-1cm DIA Gravel	N/A
20-40	N/A	" "	N/A

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Appendix G-1

Greenhouse Gas and Energy Technical Report

MOJAVE MICRO MILL PROJECT, KERN COUNTY, CA

Greenhouse Gas and Energy Technical Report

Prepared for
Pacific Steel Group
4805 Murphy Canyon Road
San Diego, CA 92123

September 2023

MOJAVE MICRO MILL PROJECT, KERN COUNTY, CA

Greenhouse Gas and Energy Technical Report

Prepared for
Pacific Steel Group
4805 Murphy Canyon Road
San Diego, CA 92123

September 2023

626 Wilshire Boulevard
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213.599.4300
esassoc.com

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D201801165.03

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ACRONYMS AND ABBREVIATIONS

Acronym	Description
AB 32	California Global Warming Solutions Act of 2006
AR4	Fourth Assessment Report (IPCC)
Basin	Mojave Desert Air Basin
BAU	Business as Usual
BPS	Best Performance Standard
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGreen Code	California Green Building Standards Code
CAPCOA	California Air Pollution Control Officer's Association
CARB	California Air Resources Board
CBSC	California Building Standards Commission
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CEUS	Commercial End-Use Survey
CH_4	Methane
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalents
County	Kern County
CPUC	California Public Utilities Commission
DPM	Diesel Particulate Matter
EKAPCD	Eastern Kern Air Pollution Control District
EMFAC	On-road vehicle emissions factor model
GHG	Greenhouse Gas
GWP	Global Warming Potential
HFCs	Hydrofluorocarbons
Hp	Horsepower

Acronym	Description
HVAC	Heating, Ventilating and Air Conditioning
IPCC	Intergovernmental Panel on Climate Change
KCOG	Kern Council of Governments
kW	Kilowatt
kWh	Kilowatt-hour
LCFS	Low Carbon Fuel Standard
LOS	Level of Service
$MMTCO_2e$	Million metric tons of carbon dioxide equivalent
MPO	Metropolitan Planning Organization
$MTCO_2e$	Metric ton of carbon dioxide equivalent
MW	Megawatt
MWh	Megawatt-hour
N_2O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standards
OFFROAD	Off-road vehicle emissions model
OPR	California Office of Planning and Research
PFCs	Perfluorocarbons
ppm	Parts per million
RPS	Renewable Portfolio Standard
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
SAR	Second Assessment Report (IPCC)
SCE	Southern California Edison
SF_6	Sulfur Hexafluoride
SIP	State Implementation Plan
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
VMT	Vehicle miles travelled

EXECUTIVE SUMMARY

The Pacific Steel Group (the "Applicant") is proposing the Mojave Micro Mill Project (proposed project) which consists of the construction of a micro mill facility and associated infrastructure necessary to produce reinforcing bar (rebar) from scrap metal (e.g., shredded automobiles, appliances, structural and sheet metal, and other pre-processed steel bundles) through various recycling processes. The proposed project is located in unincorporated southeastern Kern County, in central California. The micro mill facility would be developed on two vacant parcels (project site) totaling approximately 174 acres located at 860 Sopp Road, Mojave, California, along Sierra Highway in Kern County. The project site is located approximately 57 miles southeast of the City of Bakersfield, approximately 4 miles north of the community of Rosamond and 8 miles south of Mojave.

The proposed project would include an approximate 475,800 square-foot all-electric micro mill facility and with an additional 51,221 square feet of accessory buildings, for a total of 527,021 square feet, as well as an approximate 63-acre accessory solar array on 174 total acres of privately owned land. Outdoor storage for scrap materials and staging is included as part of the proposed project.

In accordance with the requirements under the California Environmental Quality Act (CEQA), this Greenhouse Gas and Energy Technical Report provides an estimate of the Greenhouse Gas (GHG) emissions for the proposed project and the potential impacts from associated construction and operational GHG emissions. The report includes the categories and types of emission sources resulting from the project, the calculation procedures used in the analysis, and any assumptions or limitations.

The proposed project would introduce short-term and temporary GHG emissions from construction, and long-term GHG emissions from operation. The following emission sources, associated with the proposed project, have been evaluated:

- *Construction* – Activities associated with construction of the proposed project, such as burning of fossil fuels for grading, building construction, paving and painting, would result in temporary and incremental increases in GHG emissions.
- *Operation* – Activities from the operation of the proposed project, such as electricity, heating, cooling, lawn care and maintenance activities, treatment and conveyance of water, burning of fossil fuels from stationary equipment, offroad vehicles, and vehicle trips to and from the proposed project would result in permanent increases in GHG emissions.

In accordance with the requirements under CEQA, this Greenhouse Gas and Energy Technical Report also provides a summary of the proposed project's anticipated energy needs, impacts, and conservation measures to determine the potential energy impacts of proposed projects, with

particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. The report includes relevant information and analyses that address the energy implications of the proposed project, the calculation procedures used in the analysis, and any assumptions or limitations.

The following energy sources, associated with the proposed project, have been evaluated:

- *Construction* – Activities associated with construction of the proposed project would result in energy demand as a result of the use of heavy-duty construction equipment, on-road trucks, and construction workers commuting to and from the project site.
- *Operation* – Activities from the operation of the proposed project would require energy in the form of electricity and natural gas for rebar production, building heating, cooling, lighting in the ancillary buildings (i.e. office, storeroom, vehicle maintenance, power control rooms, etc.), water demand and wastewater treatment, electronics, and other energy needs; transportation-fuels, primarily gasoline, for vehicles traveling to and from the proposed project.

This report evaluates the potential for the proposed project to generate GHG emissions and energy consumption either directly or indirectly, that may have a significant impact on the environment, or to conflict with applicable plans, regulations for the purpose of reducing GHG emissions and energy consumption. Calculation worksheets and technical data used in this analysis are provided in Appendix A of this report. The findings of the analyses are as follows:

- Implementation of the proposed project would generate GHG emissions that would have a less than significant impact on the environment during both construction and operation.
- The proposed project would not conflict with applicable plans, policies, and strategies to reduce GHG emissions.
- The proposed project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.
- The proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

SECTION 1
Introduction

1.1 Existing Conditions

The Mojave Micro Mill Project ("project" or "proposed project") will be situated on a 174-acre site located at 860 Sopp Road, at the southeast corner of Sopp Road and Sierra Highway, in unincorporated southeastern Kern County, California. The project site is bounded by the Union Pacific Railway and Sierra Highway (west), Sopp Road (north), vacant land (south) and Edwards Air Force Base (east). The project site is located approximately 57 miles southeast of the City of Bakersfield, approximately 4 miles north of the unincorporated community of Rosamond and 8 miles south of the unincorporated community of Mojave in unincorporated Kern County, California. Regional access to the project site is provided by State Route 14. The project site would be accessed by Backus Road one mile north of the project site, from Sierra Highway to the east off of State Route 14. The proposed project is located in the western portion of the Mojave Desert, in the Antelope Valley area. The Mojave Desert is to the south and east of several low mountain ranges and is dominated by desert vegetation. Topography is mostly flat, but elevations gradually rise toward the west and northwest. The Tehachapi Mountains are to the north and west and the San Gabriel Mountains to the south. The project site is shown in **Figure 1**, *Regional and Site Location.*

Nearby uses surrounding the project site include vacant agriculturally designated land to the south, industrial development (Shemshad Food Products Inc.) to the north, the proposed Edwards Solar Facility followed by Edwards Airforce Base lie east of the project site, and vacant agricultural land, Sierra Highway, and Union Pacific lie to the west of the project site. The immediate area surrounding the project site has a few nearby residences; the nearest residence is approximately 1,000 feet to the northwest. Farther away are a few clusters of unincorporated residences are located near the State Route 14 and Backus Road exit, as well as approximately 1.25 miles west of the project site beyond State Route 14. Figure 1, Regional and Site Location, shows the project site and surrounding land uses.



SOURCE: ESRI World Topographic Map.

Mojave Micro Mill Project

Figure 1
Regional and Site Location

ESA

1.2 Project Description

The proposed project would include development of an approximate 475,800 square-foot all-electric micro mill facility which would produce and fabricate reinforcing steel commonly known as “rebar”. The proposed project would also include an additional 51,221 square feet of accessory buildings, for a total of 527,021 square feet, as well as an approximate 63-acre accessory solar array on 174 total acres of privately owned land that is currently vacant. Outdoor storage for scrap materials and staging is included as part of the proposed project.

The 475,800 square-foot micro mill facility would include 13 connected and standalone buildings for raw materials handling, melt shop processes, rolling mill processes, and fabrication shop processes. The micro mill facility would support seven ancillary structures for storeroom and vehicle maintenance, office building, locker room, slag processing office building, containerized power control room, guard shack/scale house, and a trucker restroom facility. Additional site components would include: 63 acres of ground-mounted solar panels, substation to support solar panels, fume treatment plant, water treatment plant, slag processing plant, dolomite and lime silos, staging and spare parts storage, numerous AC power unit substations located throughout the project site to power the various buildings, on-site access corridors, perimeter security fencing, on-site parking area, road improvements along Sopp Road and future private road south of Lone Butte Road/Sopp Road corner, landscaping, and new pavement, curb and gutter, and sidewalk.

It is anticipated that construction activities would commence as early as the fourth quarter of 2023 with full build-out occurring in the fourth quarter of 2025, for a total of 24 months of construction.

1.3 Existing Greenhouse Gas Environment

1.3.1 Global Climate Change

Global climate change refers to changes in average climatic conditions on Earth as a whole, including changes in temperature, wind patterns, precipitation and storms. Historical records indicate that global climate changes have occurred in the past due to natural phenomena; however, current data increasingly indicate that the current global conditions differ from past climate changes in rate and magnitude. Global climate change attributable to anthropogenic (human) GHG emissions is currently one of the most important and widely debated scientific, economic and political issues in the United States and the world. The extent to which increased concentrations of GHGs have caused or will cause climate change and the appropriate actions to limit and/or respond to climate change are the subject of significant and rapidly evolving regulatory efforts at the federal and state levels of government.

GHGs are those compounds in the Earth’s atmosphere which play a critical role in determining temperature near the Earth’s surface. More specifically, these gases allow high-frequency shortwave solar radiation to enter the Earth’s atmosphere, but retain some of the low frequency infrared energy which is radiated back from the Earth towards space, resulting in a warming of the atmosphere. Not all GHGs possess the same ability to induce climate change; as a result, GHG contributions are commonly quantified in the units of equivalent mass of carbon dioxide

(CO_2e). Mass emissions are calculated by converting pollutant specific emissions to CO_2e emissions by applying the proper global warming potential (GWP) value.[1] These GWP ratios are available from the Intergovernmental Panel on Climate Change (IPCC). Historically, GHG emission inventories have been calculated using the GWPs from the IPCC's Second Assessment Report (SAR). The IPCC updated the GWP values based on the latest science in its Fourth Assessment Report (AR4). The updated GWPs in the IPCC AR4 have begun to be used in recent GHG emissions inventories. By applying the GWP ratios, project-related CO_2e emissions can be tabulated in metric tons per year. Typically, the GWP ratio corresponding to the warming potential of CO_2 over a 100-year period is used as a baseline. The CO_2e values are calculated for construction years and project build-out conditions in order to generate GHG emissions for construction and operation. Compounds that are regulated as GHGs are discussed below.[2,3]

- **Carbon Dioxide (CO_2):** CO_2 is the most abundant GHG in the atmosphere and is primarily generated from fossil fuel combustion from stationary and mobile sources. CO_2 is the reference gas (GWP of 1) for determining the GWPs of other GHGs.[4]
- **Methane (CH_4):** CH_4 is emitted from biogenic sources (i.e., resulting from the activity of living organisms), incomplete combustion in forest fires, landfills, manure management, and leaks in natural gas pipelines. The GWP of CH_4 is 21 in the IPCC SAR and 25 in the IPCC AR4.[5]
- **Nitrous Oxide (N_2O):** N_2O produced by human-related sources including agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuel, adipic acid production, and nitric acid production. The GWP of N_2O is 310 in the IPCC SAR and 298 in the IPCC AR4.[6]
- **Hydrofluorocarbons (HFCs):** HFCs are fluorinated compounds consisting of hydrogen, carbon, and fluorine. They are typically used as refrigerants in both stationary refrigeration and mobile air conditioning systems. The GWP of HFCs ranges from 140 for HFC-152a to 11,700 for HFC-23 in the IPCC SAR and 124 for HFC-152a to 14,800 for HFC-23 in the IPCC AR4.[7]
- **Perfluorocarbons (PFCs):** PFCs are fluorinated compounds consisting of carbon and fluorine. They are primarily created as a byproduct of aluminum production and semiconductor manufacturing. The GWPs of PFCs range from 6,500 to 9,200 in the IPCC SAR and 7,390 to 17,700 in the IPCC AR4.[8]

1 GWPs and associated CO_2e values were developed by the Intergovernmental Panel on Climate Change (IPCC), and published in its Second Assessment Report (SAR) in 1996. Historically, GHG emission inventories have been calculated using the GWPs from the IPCC's SAR. The IPCC updated the GWP values based on the latest science in its Fourth Assessment Report (AR4). The California Air Resources Board (CARB) has begun reporting GHG emission inventories for California using the GWP values from the IPCC AR4.

2 Intergovernmental Panel on Climate Change (IPCC), Second Assessment Report, Working Group I: The Science of Climate Change, 1995, https://www.ipcc.ch/site/assets/uploads/2018/05/2nd-assessment-en-1.pdf. Accessed October 2022.

3 IPCC, Fourth Assessment Report (AR4), Working Group I Report: The Physical Science Basis, Table 2.14, 2007, https://www.ipcc.ch/site/assets/uploads/2018/02/ar4-wg1-chapter2-1.pdf. Accessed October 2022.

4 IPCC, AR4, Working Group I Report: The Physical Science Basis, Table 2.14.

5 IPCC, AR4, Working Group I Report: The Physical Science Basis, Table 2.14.

6 IPCC, AR4, Working Group I Report: The Physical Science Basis, Table 2.14.

7 IPCC, AR4, Working Group I Report: The Physical Science Basis, Table 2.14.

8 IPCC, AR4, Working Group I Report: The Physical Science Basis, Table 2.14.

- **Sulfur Hexafluoride (SF_6):** SF_6 is a fluorinated compound consisting of sulfur and fluoride. It is a colorless, odorless, nontoxic, nonflammable gas. It is most commonly used as an electrical insulator in high voltage equipment that transmits and distributes electricity. SF_6 has a GWP of 23,900 in the IPCC SAR and 22,800 in the IPCC AR4.[9]
- **Nitrogen Trifluoride (NF_3):** NF3 is a fluorinated compound consisting of nitrogen and fluoride. It is an inorganic, colorless, non-flammable, toxic gas with a slightly musty odor. NF_3 is used as a replacement for SF_6 in the electronics industry. It is typically used in plasma etching and chamber cleaning during the manufacturing of semi-conductors and liquid crystal display (LCD) panels.[10] NF_3 has a GWP of 17,200 in the IPCC AR4, and 16,100 in the IPCC AR5.

Worldwide man-made emissions of GHGs in 2020 were approximately 49,800 million metric tons of carbon dioxide equivalent ($MMTCO_2e$) a decline of approximately 4 percent from 2019 emissions due to the Covid-19 pandemic.[11] Emissions of CO_2 from fossil fuel use and industrial processes account for 73 percent of the total global GHG emissions. Methane emissions account for 19 percent, N_2O emissions for 6 percent, and fluorinated-gases account for 3 percent of global GHG emissions. [12] In 2020, the United States was the world's second largest emitter of carbon dioxide equivalent at 5,600 $MMTCO_2e$, approximately 11.3 percent of the global GHG emissions (China was the largest emitter of carbon dioxide equivalent at 14,300 $MMTCO_2e$, approximately 28.7 percent of global GHG emissions).[13]

CARB compiles GHG inventories for the State of California. The most updated inventory reports the State's GHG emissions inventory from calendar year 2020. Based on the 2020 GHG inventory data (i.e., the latest year for which data are available from CARB), California emitted 369.2 $MMTCO_2e$ including emissions resulting from imported electrical power.[14] Between April 2010 and July 2020, the population of California grew by an annualized rate of 0.64 percent to a total of 39.78 million.[15] In addition, the carbon intensity of California's economy (the amount of carbon pollution per million dollars of gross domestic product (GDP)) is declining. The California economy, measured as gross state product, grew from $773 billion in 1990 to $3.4 trillion in 2021 representing an increase of over three times the 1990 gross state product.[16]

9 IPCC, AR4, Working Group I Report: The Physical Science Basis, Table 2.14.

10 Greenhouse Gas Protocol, Required Greenhouse Gases in Inventories. February 2013. Available at: https://www.ghgprotocol.org/sites/default/files/ghgp/NF3-Amendment_052213.pdf. Accessed December 2022.

11 PBL Netherlands Environmental Assessment Agency and the European Commission Joint Research Center, Trends in Global CO_2 and Total Greenhouse Gas Emissions 2021 Report, August 2022. PBL report template. Accessed January 2023.

12 PBL Netherlands Environmental Assessment Agency and the European Commission Joint Research Center, Trends in Global CO_2 and Total Greenhouse Gas Emissions 2021 Report, August 2022.. PBL report template. Accessed January 2023.

13 PBL Netherlands Environmental Assessment Agency and the European Commission Joint Research Center, Trends in Global CO_2 and Total Greenhouse Gas Emissions 2021 Report, August 2022. PBL report template. Accessed January 2023.

14 CARB, California Greenhouse Gas Emissions for 2000–2020 – by Category as Defined in the 2008 Scoping Plan, October 26, 2022. https://ww2.arb.ca.gov/sites/default/files/classic/cc/inventory/ghg_inventory_scopingplan_sum_2000-20.pdf. Accessed October 2022.

15 California Department of Finance, "E-6. Population estimates and components of change by county 2010–2020," 2020, December. http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-6/. Accessed October 2022.

16 California Department of Finance, Gross State Product, 2021, https://dof.ca.gov/Forecasting/Economics/economic-indicators/gross-state-product/. Accessed December2022. Amounts are based on current dollars as of May 2022.

California's economy, as with most of the county, experienced a decline in gross state product in 2020 ($3.0 trillion) due to the Covid 19 pandemic. Despite the population and economic growth experienced in 2021, California's net GHG emissions were reduced to below 1990 levels in 2020.[17] According to CARB, as of 2016, statewide GHG emissions dropped below the 2020 GHG Limit (431 $MMTCO_2e$) and have remained below the limit since that time, due in part to the state's GHG reduction programs (such as the Renewables Portfolio Standard, Low Carbon Fuel Standard (LCFS), vehicle efficiency standards, and declining caps under the Cap and Trade Program). **Table 1**, *State of California Greenhouse Gas Emissions,* identifies and quantifies Statewide anthropogenic GHG emissions and sinks (e.g., carbon sequestration due to forest growth) in 1990 and 2020 (i.e., the most recent year in which data are available from CARB). As shown in Table 1, the transportation sector is the largest contributor to Statewide GHG emissions at approximately 37 percent in 2020

TABLE 1
STATE OF CALIFORNIA GREENHOUSE GAS EMISSIONS

Category	Total 1990 Emissions using IPCC SAR ($MMTCO_2e$)	Percent of Total 1990 Emissions	Total 2020 Emissions using IPCC AR4 ($MMTCO_2e$)	Percent of Total 2020 Emissions
Transportation	150.7	35%	135.8	36.8%
Electric Power	110.6	26%	59.5	16.1%
Commercial	14.4	3%	11.6	3.6%
Residential	29.7	7%	25.3	6.8%
Industrial	103.0	24%	73.3	19.9%
Recycling and Waste [a]	–	–	8.9	2.4%
High-GWP/Non-Specified [b]	1.3	<1%	21.3	5.8%
Agriculture/Forestry	23.6	6%	31.6	8.6%
Forestry Sinks [c]	-6.7		--	--
Net Total (IPCC AR4) [d]	**431**	**100%**	**369.2**	**100%**

[a] Included in other categories for the 1990 emissions inventory.
[b] High-GWP gases are not specifically called out in the 1990 emissions inventory.
[c] Revised methodology under development (not reported for 2019).
[d] CARB revised the State's 1990 level GHG emissions using GWPs from the IPCC AR4.

SOURCES: California Air Resources Board, California Greenhouse Gas Emissions for 2000 to 2020. Trends of Emissions and Other Indicators. October 26, 2022. https://ww2.arb.ca.gov/sites/default/files/classic/cc/inventory/2000-2020_ghg_inventory_trends.pdf. Accessed January 2023.

1.3.2 Effects of Global Climate Change

The scientific community's understanding of the fundamental processes responsible for global climate change has improved over the past decade, and its predictive capabilities are advancing. However, there remain significant scientific uncertainties in, for example, predictions of local effects of climate change, occurrence, frequency, and magnitude of extreme weather events,

[17] California Department of Finance, Gross State Product, 2021, https://dof.ca.gov/Forecasting/Economics/economic-indicators/gross-state-product/. Accessed January 2023. Amounts are based on current dollars as of May 2022.

effects of aerosols, changes in clouds, shifts in the intensity and distribution of precipitation, and changes in oceanic circulation. Due to the complexity of the Earth's climate system and inability to accurately model it, the uncertainty surrounding climate change may never be completely eliminated. Nonetheless, the IPCC's *Fifth Assessment Report, Summary for Policy Makers* states that, "it is *extremely likely* that more than half of the observed increase in global average surface temperature from 1951 to 2010 was caused by the anthropogenic increase in greenhouse gas concentrations and other anthropogenic forces [*sic*] together."[18] A report from the National Academy of Sciences concluded that 97 to 98 percent of the climate researchers most actively publishing in the field support the tenets of the IPCC in that climate change is very likely caused by human (i.e., anthropogenic) activity.[19]

According to the California EPA, the potential impacts in California due to global climate change may include: loss in snow pack; sea level rise; more extreme heat days per year; more high ozone days; more large forest fires; more drought years; increased erosion of California's coastlines and sea water intrusion into the Sacramento and San Joaquin Deltas and associated levee systems; and increased pest infestation.[20] Data regarding potential future climate change impacts are available from the Cal-Adapt website which represents a projection of potential future climate scenarios. The data are comprised of the average values from a variety of scenarios and models and are meant to illustrate how the climate may change based on a variety of different potential social and economic factors. Below is a summary of some of the of the impacts that could be experienced in California as a result of global warming and climate change.

Temperature and Air Quality

Higher temperatures, conducive to air pollution formation, could worsen air quality in California. Climate change may increase the concentration of ground-level ozone, but the magnitude of the effect, and therefore, its indirect effects, are uncertain. If higher temperatures are accompanied by drier conditions, the potential for large wildfires could increase, which, in turn, would worsen air quality. Additionally, severe heat accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks throughout the state. [21] However, if higher temperatures are accompanied by wetter, rather than drier conditions, the rains would tend to temporarily clear the air of particulate pollution and reduce the incidence of large

18 IPCC, Climate Change 2014: Synthesis Report, Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, Summary for Policy Makers, 2014, page 5, https://www.ipcc.ch/site/assets/uploads/2018/02/AR5_SYR_FINAL_SPM.pdf. Accessed October 2022.

19 Anderegg, William R. L., J.W. Prall, J. Harold, S.H., Schneider, Expert Credibility in Climate Change, Proceedings of the National Academy of Sciences of the United States of America, 2010, 107:12107-12109. https://www.pnas.org/doi/10.1073/pnas.1003187107. Accessed October 2022.

20 California Environmental Protection Agency, Climate Action Team, Climate Action Team Report to Governor Schwarzenegger and the Legislature, 2006. https://www.csus.edu/indiv/s/shulockn/Executive%20Fellows%20PDF%20readings/Climate%20Action%20Team%20Report.pdf. Accessed October 2022.

21 California Energy Commission, Scenarios of Climate Change in California: An Overview, February 2006, https://www.sustainable-design.ie/arch/California2006_Climate-Change-Scenarios.pdf. Accessed October 2022.

wildfires, thus ameliorating the pollution associated with wildfires. Minimum temperatures rose up to four times faster than maximum temperatures in the San Joaquin Valley. [22]

Heat events are projected to become more frequent and last longer. Since the 1980s, heat waves have become more humid, in part due to ocean warming, which prevents surfaces from cooling down at night, leading to higher nighttime temperatures. Southern California also has experienced the greatest nighttime extreme heat trends, at least two times greater than daytime tends, and it experiences the greatest increases in both daytime and nighttime heat extremes during late spring (April–June).[23] Data suggest that the predicted future increase in temperatures resulting from climate change could potentially interfere with efforts to control and reduce ground-level ozone in the region.

According to the Cal-Adapt website's "Local Climate Change Snapshot" database[24], the project site could see an average annual increase in maximum temperature to 79.7 to 80.6 °F in the mid-century (2035-2064) and 80.8 to 84.3 °F at the end of the century (2070-2099) compared to 75.3 °F for the baseline period (1961-1990). The average annual number of extreme heat days also could increase to 21 to 26 days in the mid-century (2035-2064) and 27 to 52 days at the end of the century (2070-2099) compared to 4 days for the baseline period (1961-1990).

Water Supply

California's highly variable climate includes inconsistent precipitation with multi-year wet or dry periods, such as the unusually wet years of 2005, 2011, and 2017, as well as the droughts of 2001-2004, 2007-2010, and 2012-2016.[25] More than other regions of the western United States, the presence or absence of these large storms within a given winter season determines California's water resources because of their contribution to snowpack. Warmer, wetter winters would increase the amount of runoff available for groundwater recharge; however, this additional runoff would occur at a time when some basins are either being recharged at their maximum capacity or are already full. Conversely, a reduced snowpack coupled with increased rainfall during winters could lead to reductions in spring runoff and higher evapotranspiration because of higher temperatures could reduce the amount of water available for recharge.[26]

In California, the spring snowpack runoff accounts for approximately 70 percent of the total water supply in the Colorado River Basin, which supplies approximately 55 percent of Southern California's water. Since the 1950's, the snow water storage measurements on April 1 have declined by about 10 percent. Models predict that the mean snow water equivalent declines to less

22 Office of Environmental Health Hazard Assessment (OEHHA), 2018. *Indicators of Climate Change in California*. May 2018. https://oehha.ca.gov/media/downloads/climate-change/report/2018caindicatorsreportmay2018.pdf. Accessed October 2022.

23 OEHHA, 2018. *Indicators of Climate Change in California*. May 2018.

24 Cal-Adapt, 2022. Local Climate Change Snapshot, 860 Sopp Road, Mojave, California 93501. https://cal-adapt.org/tools/local-climate-change-snapshot/. Accessed October 2022.

25 California Natural Resources Agency (CNRA), 2018. California's Fourth Climate Change Assessment, Statewide Summary Report. https://www.energy.ca.gov/sites/default/files/2019-11/Statewide_Reports-SUM-CCCA4-2018-013_Statewide_Summary_Report_ADA.pdf. Accessed October 2022.

26 Pacific Institute for Studies in Development, Environment and Security (PISDES), 2003. Climate Change and California Water Resources: A Survey and Summary of the Literature. July 2003. https://pacinst.org/wp-content/uploads/2003/07/climate_change_and_california_water_resources.pdf. Accessed October 2022.

than two-thirds of its historical average by 2050, and by less than half by 2100. Unfortunately, the decline in the spring snowpack occurs even if precipitation amounts remain relatively stable; the snow loss results from a warmer climate.[27] The loss of snowpack would reduce the amount of water available. According to the Cal-Adapt website's "Local Climate Change Snapshot" database[28], the project site could see an average annual length of dry spells of 169 to 170 days in the mid-century (2035-2064) and 172 to 182 days at the end of the century (2070-2099) compared to 162 days for the baseline period (1961-1990). The average annual precipitation could decrease to 5.7 to 5.6 inches in the mid-century (2035-2064) and 5.8 to 5.6 inches at the end of the century (2070-2099) compared to 5.9 inches for the baseline period (1961-1990).

The California Natural Resources Agency (CNRA) and California Energy Commission (CEC) report dated 2018[29] on climate change and effects on the State Water Project (SWP), the Central Valley Project (CVP), and the Sacramento-San Joaquin Delta, concluded that "climate change poses an ever-growing threat to the well-being, public health, natural resources, economy, and environment of California. Even under the best scenario for global emission reductions, additional climate change impacts are inevitable. …[C]limate change would bring significant negative impacts on current SWP and CVP operations due to the [global] warming." By the middle of the century, climate change would cause negative effects on the water supply, including south of Delta exports being reduced by a half million-acre feet, north Delta carryover storage being diminished by 1.5-million-acre feet, with worsening water quality.[30]

To enhance the long-term reliability of water supply in the project area, the Antelope Valley East Kern-East Kern Water Agency has set the following goals in its 2020 Urban Water Management Plan:[31]

- Develop groundwater banking programs to help increase the reliability of the Antelope Valley region's water supplies by storing excess State Water Project water during wet periods and recovering it for delivery to customers during dry and high-demand periods or during a disruption of in deliveries from the State Water Project.

Hydrology and Sea Level Rise

The central and southern coast has experienced a sea level rise of more than 5.9 inches over the 20th century and sea levels will continue to rise substantially over the 21st century. Sea level rise can be a product of global warming through two main processes: expansion of seawater as the oceans warm and melting of ice over land. Flooding from sea level rise and coastal wave events leads to bluff, cliff, and beach erosion, which could affect large geographic areas. Future

27 CNRA, 2018. California's Fourth Climate Change Assessment, Statewide Summary Report.

28 Cal-Adapt, 2022. Local Climate Change Snapshot, 860 Sopp Road, Mojave, California 93501. https://cal-adapt.org/tools/local-climate-change-snapshot/. Accessed October 2022.

29 California Natural Resources Agency (CNRA) and California Energy Commission (CEC), 2018. Mean and Extreme Climate Change Impacts on the State Water Project, A Report for: California's Fourth Climate Change Assessment, August 2018. https://www.energy.ca.gov/sites/default/files/2019-12/Water_CCCA4-EXT-2018-004_ada.pdf. Accessed October 2022.

30 CNRA and CEC, 2018. Mean and Extreme Climate Change Impacts on the State Water Project, A Report for: California's Fourth Climate Change Assessment, August 2018.

31 Antelope Valley East Kern Water Agency, 2020 Urban Water Management Plan, May 2021 https://www.avek.org/files/2a8e325f5/AVEK+2020+UWMP_Public+Draft_210525.pdf. Accessed October 2022.

modeling simulations estimate that 31–67 percent of Southern California beaches may become completely eroded to the landward limit of coastal infrastructure or cliffs by the end of the century, assuming sea level rise scenarios from 3 to 6.6 feet and limited human intervention.[32] The rise in sea levels could jeopardize California's water supply. Increased storm intensity and frequency could also affect the ability of flood-control facilities, including levees, to handle storm events.

California historically has experienced multi-year droughts and has been able to support agricultural water demands through groundwater reserves, winter snowpack, reservoir storage, and conveyance of water throughout the state in canals. However, the higher temperatures that come with climate change will likely decrease snow storage and cause more frequent and severe droughts and will require additional preparedness for more frequent surface water shortages and reliance on sustainable groundwater management.[33]

Agriculture

California has an approximately $49-billion agricultural industry that produces half the country's fruits, vegetables, nuts, flowers, and nursery crops.[34] Many of California's important crops, including fruit and nut trees, are particularly vulnerable to climate change impacts like changing temperature regimes and water-induced stress. Under changing climate conditions, agriculture is projected to experience lower crop yields due to extreme heat waves, heat stress and increased water needs of crops and livestock (particularly during dry and warm years), and new and changing pest and disease threats.[35] Higher CO_2 levels can stimulate plant production and increase plant water use efficiency. However, if temperatures rise and drier conditions prevail, water demand could increase; crop-yield could be threatened by a less reliable water supply; and greater ozone pollution could render plants more susceptible to pest and disease outbreaks and interfere with plant growth. In addition, temperature increases could change the time of year crops are harvested, and thus affect their quality.[36]

Ecosystems and Wildlife

Changes in temperature, precipitation, food sources, competition for prey, and other physical or biological features of the habitat may force changes in the timing of key life-cycle events for plants and animals and shift the ranges where these plants and animals live.[37] Range shifts have been observed in approximately 75 percent of small animal species and over 80 percent of bird species in the Sierra Nevada. High-elevation mammals moved upslope, while birds and low-

32 CNRA and CEC, 2018. Mean and Extreme Climate Change Impacts on the State Water Project, A Report for: California's Fourth Climate Change Assessment.

33 CNRA and CEC, Mean and Extreme Climate Change Impacts on the State Water Project, A Report for: California's Fourth Climate Change Assessment, 2018.

34 California Department of Food and Agriculture, 2022. California Agricultural Production Statistics: 2021 Crop Year Report. September. https://www.cdfa.ca.gov/Statistics/. Accessed October 2022.

35 CNRA, California's Fourth Climate Change Assessment, Statewide Summary Report, 2018. https://www.energy.ca.gov/sites/default/files/2019-11/Statewide_Reports-SUM-CCCA4-2018-013_Statewide_Summary_Report_ADA.pdf. Accessed July 13, 2022.

36 California Climate Change Center, 2006. *Our Changing Climate: Assessing the Risks to California*. https://www.engr.scu.edu/~emaurer/papers/CEC-500-2006-077.pdf. Accessed October 2022.

37 CNRA, California's Fourth Climate Change Assessment, Statewide Summary Report, 2018.

elevation mammals moved downslope as frequently as upslope. The varied responses reflect the species intrinsic sensitivity to temperature, precipitation, or other physical factors, such as changes in food sources, vegetation, and interactions with competitors. Additionally, range shifts have been noted in wintering bird species and time shifts of arriving species have been noted in butterflies and migratory birds. Furthermore, ocean acidification has affected many marine organisms and their food chain. Chinook salmon have been affected by climate change by both the number of adults returning to spawn and the increased mortality rate among juvenile salmon. Finally, during years of warmer sea temperature, California sea lions have had fewer birth rates, higher pup mortality, and increased numbers of pups having poor conditions.[38]

Wildfire

Wildfires in California over the past two decades are shown to be increasing in size, severity, and adverse impacts.[39] Warming temperatures as a result of climate change influences the length of both the fire and growing seasons and consequently affects the amount of time and intensity fires burn at and the amount of available fuels. Higher temperatures lead to drought, which decreases the fuel moisture and increases the likelihood of ignitions.[40]

According to the Cal-Adapt website's "Local Climate Change Snapshot" database,[41] the project site could see an average annual area burned of approximately 5.5 to 3.6 acres in the mid-century (2035-2064) and 4.1 to 3.1 acres at the end of the century (2070-2099) compared to 6.7 to 6.9 acres for the baseline period (1961-1990). Increased wildfire activity leads to more GHG emissions from sources that would otherwise be carbon sinks. Between 2000 and 2019, emissions from wildfires ranged from a low of 1.2 $MMTCO_2e$ in 2010 to a high of 39 $MMTCO_2e$ in 2018, with an annual average of 14 $MMTCO_2e$. Further, CARB estimates that wildfire emissions increased dramatically in 2020, totaling 112 $MMTCO_2e$.[42]

Human Adaptation

Humans are better able to adapt to a changing climate than plants and animals in natural ecosystems. Nevertheless, climate change poses direct and indirect risks to public health, as people will experience earlier death and worsening illnesses. Temperature increases cause heat-related deaths and illnesses. In 2006, reported heat-related deaths and illness were much higher than in any other year because of a prolonged heat wave.[43] Nineteen heat-related events that had significant impacts on human health occurred from 1999 to 2009, resulting in about 11,000 excess hospitalizations.[44] Additionally, indicators of the impacts of climate change on human

38 OEHHA, *Indicators of Climate Change in California*. May 2018.

39 CARB, Draft *Greenhouse Gas Emissions of Contemporary Wildfire, Prescribed Fire, and Forest Management Activities*, December 2020. https://ww3.arb.ca.gov/cc/inventory/pubs/ca_ghg_wildfire_forestmanagement.pdf. Accessed October 2022.

40 CARB, Draft *Greenhouse Gas Emissions of Contemporary Wildfire, Prescribed Fire, and Forest Management Activities*, December 2020.

41 Cal-Adapt, 2022. Local Climate Change Snapshot, 860 Sopp Road, Mojave, California 93501. https://cal-adapt.org/tools/local-climate-change-snapshot/. Accessed October 2022.

42 CARB, 2020. Draft *Greenhouse Gas Emissions of Contemporary Wildfire, Prescribed Fire, and Forest Management Activities*. December.

43 OEHHA, *Indicators of Climate Change in California*, May 2018.

44 CNRA, California's Fourth Climate Change Assessment, Statewide Summary Report, 2018.

health show that warming temperatures and changes in precipitation also can affect vector-borne pathogen transmission and disease patterns in California.

1.3.3 Existing Site Greenhouse Gas Emissions

As discussed previously, the project site is currently vacant, thus there are no existing emissions. All project emissions will be new emissions.

1.4 Existing Energy Usage

1.4.1 Existing Electricity Sales

Electricity, a consumptive utility, is a man-made resource. The production of electricity requires the consumption or conversion of energy resources, including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources, into energy. The delivery of electricity involves a number of system components for distribution and use. The electricity generated is distributed through a network of transmission and distribution lines commonly called a power grid.

Energy capacity, or electrical power, is generally measured in watts (W), while energy use is measured in watt-hours (Wh). For example, if a light bulb has a capacity rating of 100 W, the energy required to keep the bulb on for 1 hour would be 100 Wh. If ten 100 W bulbs were on for 1 hour, the energy required would be 1,000 Wh or 1 kilowatt-hour (kWh). On a utility scale, the capacity of a generator is typically rated in megawatts (MW), which is 1 million watts, while energy usage is measured in megawatt-hours (MWh) or gigawatt-hours (GWh), which is 1 billion watt-hours.

Southern California Edison (SCE) is the utility provider for the project site. SCE provides electricity to approximately 15 million people, 180 incorporated cities, 15 counties, 5,000 large businesses, and 280,000 small businesses throughout its 50,000-square-mile service area.[45] In 2021, SCE's total electricity sales in the SCE service area was estimated to be 82,048 GWh.[46] SCE produces and purchases their energy from a mix of conventional and renewable generating sources. **Table 2**, *Electric Power Mix Delivered to Retail Customers in 2021*, shows the electric power mix that was delivered to retail customers for SCE compared to the statewide 2021 power mix. Total electricity sales/usage for SCE is shown in Table 2 compared to the statewide electricity sales/usage from the most recent year for which data is available. SCE is required to commit to the use of renewable energy sources for compliance with the Renewable Portfolio Standards (RPS). In 2021, SCE procured 35.8 percent of its energy portfolio from renewable sources which compiles with the RPS of 33 percent by 2020.[47]

45 Southern California Edison (SCE), Who We Are. Available at: https://www.sce.com/about-us/who-we-are. Accessed October 2022.

46 Edison International. Edison International and Southern California Edison 2021 Financial and Statistical Report. https://www.edison.com/content/dam/eix/documents/investors/sec-filings-financials/2021-financial-statistical-report.pdf. Accessed October 2022.

47 SCE, 2021 Sustainability Report, 2022. https://www.edison.com/content/dam/eix/documents/sustainability/eix-2021-sustainability-report-scorecard.pdf. Accessed October 2022.

TABLE 2
ELECTRIC POWER MIX DELIVERED TO RETAIL CUSTOMERS IN 2021

Energy Resource	2021 SCE	2021 CA Power Mix (for comparison)
Electricity Total Sales/Usage (million kilowatt-hours)	**85,048**	**277,764**
Eligible Renewable	**31.4%** [a]	**33.6%** [a]
Biomass & bio-waste	0.1%	2.3%
Geothermal	5.7%	4.8%
Eligible hydroelectric	0.5%	1.0%
Solar	14.9%	14.2%
Wind	10.2%	11.4%
Coal	**0.0%**	**3.0%**
Large Hydroelectric	**2.3%**	**9.2%**
Natural Gas	**22.3%**	**37.9%**
Nuclear	**9.2%**	**9.3%**
Other	**0.2%**	**0.2%**
Unspecified sources of power [b]	**34.6%**	**6.8%**
Total [c]	**100%**	**100%**

NOTES:

[a] Percentages are estimated annually by the California Energy Commission based on the electricity sold to California consumers during the previous year. The eligible renewable percentage above does not reflect Renewable Portfolio Standard compliance, which is determined using a different methodology.

[b] "Unspecified sources of power" means electricity from transactions that are not traceable to specific generation sources.

[c] Totals may not add up exactly due to rounding.

SOURCES:

California Energy Commission, Total System Electric Generation. Available at: https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2021-total-system-electric-generation. Accessed October 2022.

Southern California Edison. SCE's Power Content Label. Available at https://www.sce.com/sites/default/files/custom-files/Web%20files/2021%20Power%20Content%20Label.pdf. Accessed October 2022.

1.4.2 Existing Natural Gas Supply

Natural gas is a combustible mixture of simple hydrocarbon compounds (primarily methane) that is used as a fuel source. Natural gas consumed in California is obtained from naturally occurring reservoirs but relies upon out-of-state imports for nearly 90 percent of its natural gas supply.[48] A majority of natural gas consumed in California is for electricity generation, along with the industrial, residential, and commercial sections.[49] Among energy commodities consumed in California, natural gas accounts for about one-third of the total primary energy consumption in terms of British thermal units (BTU).[50] Natural gas is typically measured in terms of cubic feet (cf) or BTU.

48 CEC, Supply and Demand of Natural Gas in California, 2022. https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california. Accessed October 2022.

49 CEC, Supply and Demand of Natural Gas in California, 2022. https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california. Accessed October 2022.

50 U.S Energy Information Administration, California State Energy Profile, March 17, 2022. https://www.eia.gov/state/print.php?sid=CA. Accessed October 2022.

Natural gas is provided to the project site by Southern California Gas (SoCalGas). SoCalGas is the principal distributor of natural gas in Southern California, serving residential, commercial, and industrial markets. The annual natural gas sale to customers in 2021 was approximately 891,695 million cf.[51] However, the proposed project proposes all-electric uses within the project site. Therefore, natural gas is not a factor in use or capacity regarding the proposed project.

1.4.3 Existing Transportation Energy

According to the Energy Information Administration (EIA), transportation accounts for approximately 34 percent of California's total energy consumption.[52] The annual transportation fuel consumption of diesel and gasoline in 2021 in California (the most recent year for which statewide data is available) is shown in **Table 3**, *Transportation Fuel Consumption in 2021*. Total transportation fuel consumption of diesel and gasoline for Kern County is shown in Table 4 and compared to statewide values. The estimated Kern County and Statewide transportation fuel consumption is based on retail sale data from the CEC.

TABLE 3
TRANSPORTATION FUEL CONSUMPTION IN 2021

Energy Resource	Kern County	California (for comparison)
Diesel (million gallons)	272.4	3,744
Gasoline (million gallons)	406	13,818

SOURCE: CEC California Retail Fuel Outlet Annual Reporting (CEC-A15) Results, 2021. Available at: https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting. Accessed October 2022. Diesel is adjusted to account for retail (50.3%) and non-retail (49.7%) diesel sales.

1.4.4 Existing Project Site

As discussed previously, the project site is currently vacant, thus there are no existing emissions. All emissions associated with the proposed project would be new emissions.

[51] California Gas and Electric Utilities, *2022 Supplemental California Gas Report*, p. 184, 2022. Daily natural gas usage in 2022 was 2,443 million cf, annual value derived by multiplying daily values by 365 days. https://www.socalgas.com/sites/default/files/Joint_Utility_Biennial_Comprehensive_California_Gas_Report_2022.pdf. Accessed October 2022.

[52] United States Energy Information Administration. California State Profile and Energy Estimates, Consumption by Sector, 2020. https://www.eia.gov/state/?sid=CA#tabs-2. Accessed October 2022.

SECTION 2
Regulatory Framework

2.1 Federal

2.1.1 Federal Clean Air Act

The United States Environmental Protection Agency (USEPA) is responsible for implementing federal policy to address GHGs. The federal government administers a wide array of public-private partnerships to reduce the GHG intensity generated in the United States. These programs focus on energy efficiency, renewable energy, methane and other non-CO_2 gases, agricultural practices, and implementation of technologies to achieve GHG reductions. The USEPA implements numerous voluntary programs that contribute to the reduction of GHG emissions. These programs (e.g., the Energy Star labeling system for energy-efficient products) encourage voluntary reductions from large corporations, consumers, industrial and commercial buildings, and many major industrial sectors.

2.1.2 Clean Air Act

In *Massachusetts v. Environmental Protection Agency* (Docket No. 05–1120), the United States Supreme Court held in April of 2007 that the USEPA has statutory authority under Clean Air Act (CAA) Section 202 to regulate GHGs. The Court did not hold that the USEPA was required to regulate GHG emissions; however, it indicated that the agency must decide whether GHGs cause or contribute to air pollution that is reasonably anticipated to endanger public health or welfare. On December 7, 2009, the USEPA Administrator signed two distinct findings regarding GHGs under CAA Section 202(a). The USEPA adopted a Final Endangerment Finding for the six defined GHGs (CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6) on December 7, 2009. The Endangerment Finding is required before USEPA can regulate GHG emissions under CAA Section 202(a)(1) consistently with the United States Supreme Court decision. The USEPA also adopted a Cause or Contribute Finding in which the USEPA Administrator found that GHG emissions from new motor vehicle and motor vehicle engines are contributing to air pollution, which is endangering public health and welfare. These findings do not, by themselves, impose any requirements on industry or other entities. However, these actions were a prerequisite for implementing GHG emissions standards for vehicles.

2.1.3 Energy Independence and Security Act

The Energy Independence and Security Act of 2007 (EISA) facilitates the reduction of national GHG emissions by requiring the following:

- Increasing the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard (RFS) that requires fuel producers to use at least 36 billion gallons of biofuel in 2022;

- Prescribing or revising standards affecting regional efficiency for heating and cooling products, procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances;
- Requiring approximately 25 percent greater efficiency for light bulbs by phasing out incandescent light bulbs between 2012 and 2014; requiring approximately 200 percent greater efficiency for light bulbs, or similar energy savings, by 2020; and
- While superseded by the USEPA and NHTSA actions described below in Section 2.a(1)(d), (i) establishing miles per gallon targets for cars and light trucks and (ii) directing the NHTSA to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for trucks.

Additional provisions of EISA address energy savings in government and public institutions, promote research for alternative energy, additional research in carbon capture, international energy programs, and the creation of green jobs.[53]

2.1.4 Executive Order 13432

In response to the *Massachusetts v. Environmental Protection Agency* ruling, President Bush signed Executive Order 13432 on May 14, 2007, directing the USEPA, along with the Departments of Transportation, Energy, and Agriculture, to initiate a regulatory process that responds to the Supreme Court's decision. Executive Order 13432 was codified into law by the 2009 Omnibus Appropriations Law signed on February 17, 2009. The order sets goals in the areas of energy efficiency, acquisition, renewable energy, toxics reductions, recycling, sustainable buildings, electronics stewardship, fleets, and water conservation.

2.1.5 Light-Duty Vehicle Greenhouse Gas and Corporate Average Fuel Economy Standards

On May 19, 2009, President Obama announced a national policy for fuel efficiency and emissions standards in the United States auto industry. In August 2012, standards were adopted for model year 2017 through 2025 passenger cars and light-duty trucks. By 2020, new vehicles are projected to achieve 41.7 mpg (if GHG reductions are achieved exclusively through fuel economy improvements) and 213 grams of CO_2 per mile (Phase II standards). By 2025, vehicles will achieve 54.5 mpg (if GHG reductions are achieved exclusively through fuel economy improvements) and 163 grams of CO_2 per mile. According to the USEPA, under these standards a model year 2025 vehicle would emit one-half of the GHG emissions from a model year 2010 vehicle.[54] In 2017, the USEPA recommended no change to the GHG standards for light-duty vehicles for model years 2022–2025.

[53] A green job, as defined by the United States Department of Labor, is a job in business that produces goods or provides services that benefit the environment or conserve natural resources.

[54] USEPA and NHTSA, EPA and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017–2025 Cars and Light Trucks, August 2012. https://nepis.epa.gov/Exe/ZyPDF.cgi/P100EZ7C.PDF?Dockey=P100EZ7C.PDF. Accessed October 2022.

In August 2018, the USEPA and NHTSA proposed the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule that would maintain the CAFE and CO_2 standards applicable in model year 2020 for model years 2021 through 2026. The estimated CAFE and CO_2 standards for model year 2020 are 43.7 mpg and 204 grams of CO_2 per mile for passenger cars and 31.3 mpg and 284 grams of CO_2 per mile for light trucks, projecting an overall industry average of 37 mpg, as compared to 46.7 mpg under the standards issued in 2012. The proposal, if adopted, would also exclude CO_2-equivalent emission improvements associated with air conditioning refrigerants and leakage (and, optionally, offsets for nitrous oxide and methane emissions) after model year 2020.[55] The proposed SAFE Vehicles Rule's public comment period was extended to October 26, 2018.[56]

On September 27, 2019, the USEPA withdrew the waiver it had previously provided to California for the state's GHG and zero-emissions vehicle programs under CAA Section 209.[57] The withdrawal of the waiver became effective November 26, 2019. The USEPA also published the final rule for the One National Program on Federal Preemption of State Fuel Economy Standards that finalizes critical parts of the SAFE Vehicles Rule and makes clear that federal law preempts state and local tailpipe GHG emissions standards as well as zero-emissions vehicle mandates. In November 2019, California and 23 other states, environmental groups, and the cities of Los Angeles and New York, filed a petition with the U.S. Court of Appeals for the District of Columbia Circuit, for the USEPA to reconsider the published rule.[58] In April 2020, the final USEPA and NHTSA SAFE Vehicles Rule was published in the Federal Register, setting fuel economy and carbon dioxide standards that increase 1.5 percent in stringency each year from model years 2021 through 2026.[59]

On January 20, 2021, President Biden issued Executive Order 13990 "Protecting Public Health and the Environment and Restoring Science To Tackle the Climate Crisis" directing the USEPA to consider whether to propose suspending, revising, or rescinding the standards previously revised under "The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks," promulgated in April 2020. On February 8, 2021, the United States Court of Appeals for the District of Columbia Circuit issued an order granting the Biden Administration's motion to stay litigation over Part 1 of SAFE Rule. Consistent with President Biden's executive order on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis, USEPA and NHTSA are now evaluating whether and how to replace the SAFE Rule.[60] On April 28, 2021, the EPA reconsidered the withdrawal of the waiver of preemption

55 NHTSA and USEPA, Federal Register / Vol. 83, No. 165 / Friday, August 24, 2018 / Proposed Rules, The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks, 2018. https://www.gpo.gov/fdsys/pkg/FR-2018-08-24/pdf/2018-16820.pdf. Accessed October 2022.

56 NHSTA, The Safer Affordable Fuel-Efficient 'SAFE' Vehicles Rule, 2020. https://www.govinfo.gov/content/pkg/FR-2020-04-30/pdf/2020-06967.pdf. Accessed October 2022.

57 USEPA, *Federal Register*, Vol. 84, No. 188, Rules and Regulations, Sections 51310–51363, Friday, September 27, 2019. https://www.govinfo.gov/content/pkg/FR-2019-09-27/pdf/2019-20672.pdf. Accessed October 2022.

58 United States District Court for the District Court of Columbia, *State of California vs. Chao*, Case 1:19-cv-02826, 2019. https://www.courtlistener.com/docket/16223795/state-of-california-v-chao/. Accessed October 2022.

59 USEPA, *Federal Register*, Vol. 84, No. 188, Rules and Regulations, Sections 51310–51363, Friday, September 27, 2019.

60 United States District Court for the District Court of Columbia, *Union of Concerned Scientists, et al., Petitioners v. National Highway Traffic Safety Administration, Respondent*, USCA Case #19-1230, 2021. http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/case-documents/2021/20210208_docket-19-1230_order.pdf. Accessed October 2022.

for California's zero emission vehicle (ZEV) programs and GHG emission standards within California's Advanced Clean Car program for purposes of rescinding that action under the Clean Air Act. On March 14, 2022, EPA rescinded their 2019 waiver withdrawal, thus bringing back into force the 2013 Advanced Clean Car program waiver, including a waiver of preemption for California's ZEV sales mandate and GHG emissions standards.[61] EPA ruled to revise the greenhouse gas emissions standards under the Clean Air Act section 202(a) for light-duty vehicles for 2023 and later model years to make the standards more stringent.[62] Moreover, on August 5, 2021, the President signed an executive order that targets making half of all new vehicles sold in 2030 zero-emissions vehicles, including battery electric, plug-in hybrid electric, or fuel cell electric vehicles.[63]

On December 30, 2021, the USEPA finalized the federal greenhouse gas emissions standards for passenger and light trucks for model years 2023 through 2026.[64] This rule prompts auto makers to use clean technologies available today and incentivizes them to produce vehicles with zero and near-zero emissions technology. The final rule revises the current SAFE rules standards, beginning in model year 2023 and increases in stringency year over year through model year 2026. The standards finalized for model year 2026 establish the most stringent GHG standards ever set for the light-duty vehicle sector. The final rule sets a stringency increase in model year 2023 by almost 10% (compared to the SAFE rule standards of model year 2022), followed by stringency increases of 5% for model year 2024, 6.6% for model year 2025, and 10% for model year 2026. The USEPA projects that the final standards will result in a reduction of 3.1 billion tons of GHG emissions by 2050 and will also reduce emissions of some criteria pollutants and air toxics.

2.1.6 Heavy-Duty Engines and Vehicles Fuel Efficiency Standards

On October 25, 2010, the USEPA and the United States Department of Transportation (USDOT) proposed the first national standards to reduce GHG and improve fuel efficiency of heavy-duty trucks and buses (also known as "Phase 1"). For combination tractors, the agencies are proposing engine and vehicle standards that begin in the 2014 model year and achieve up to a 20 percent reduction in carbon dioxide emissions and fuel consumption by the 2018 model year. For heavy-duty pickup trucks and vans, the agencies are proposing separate gasoline and diesel truck standards, which phase in starting in the 2014 model year and achieve up to a 10 percent reduction for gasoline vehicles and up to a 15 percent reduction for diesel vehicles by 2018 model

61 Federal Register, 2022. *California State Motor Vehicle Pollution Control Standards; Advanced Clean Car Program; Reconsideration of a Previous Withdrawal of a Waiver of Preemption; Notice of Decision*. Federal Register / Vol. 87, No. 49 / Monday, March 14, 2022 / Notices. Available: https://www.federalregister.gov/documents/2022/03/14/2022-05227/california-state-motor-vehicle-pollution-control-standards-advanced-clean-car-program. Accessed October 2022.

62 Federal Register, 2021. *Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards, Final Rule*. Federal Register / Vol. 86, No. 248/ Thursday, December 30, 2021 / Rules and Regulations. Available: https://www.govinfo.gov/content/pkg/FR-2021-12-30/pdf/2021-27854.pdf. Accessed October 2022.

63 White House Briefing Room, 2021. Fact Sheet: President Biden Announces Steps to Drive American Leadership Forward on Clean Cars and Trucks, August 5. Available: https://www.whitehouse.gov/briefing-room/statements-releases/2021/08/05/fact-sheet-president-biden-announces-steps-to-drive-american-leadership-forward-on-clean-cars-and-trucks/. Accessed October 2022.

64 USEPA, 2021. Federal Register/ Vol. 86, No. 248, Thursday, December 30, 2021. Revised 2023 and Later Model Year Light Duty Vehicle Greenhouse Gas Emissions Standards. Available: https://www.federalregister.gov/documents/2021/12/30/2021-27854/revised-2023-and-later-model-year-light-duty-vehicle-greenhouse-gas-emissions-standards. Accessed October 2022.

year (12% and 17% respectively if accounting for air conditioning leakage). Lastly, for vocational vehicles (includes other vehicles like buses, refuse trucks, concrete mixers; everything except for combination tractors and heavy-duty pickups and vans), the agencies are proposing engine and vehicle standards starting in the 2014 model year, which would achieve up to a 10 percent reduction in fuel consumption and carbon dioxide emissions by the 2018 model year. Building on the success of the standards, the USEPA and USDOT jointly finalized additional standards (called "Phase 2") for medium- and heavy-duty vehicles through model year 2027 that will improve fuel efficiency and cut carbon pollution. The final standards are expected to lower CO_2 emissions by approximately 1.1 billion metric tons.

2.1.7 Paris Agreement

During the Leaders' Summit on Climate in April 2021, President Biden fulfilled his promise to rejoin the Paris Agreement and set a course for the United States to tackle the climate crisis at home and abroad, reaching net zero emissions economy-wide by no later than 2050. Additionally, as part of reentering the Paris Agreement, the United States established a new 2030 GHG emissions target, known as the "nationally determined contribution," which is a formal submission to the UNFCCC. The United States' nationally determined contribution target aims for a 50–52 percent reduction in GHG emissions from 2005 levels by 2030.[65] To achieve these goals, the United States has committed to all of the following actions:

- Achieve 100 percent carbon pollution-free electricity by 2035.
- Support efficiency upgrades and electrification in buildings.
- Reduce carbon pollution from the transportation sector.
- Reduce emissions from forests and agriculture and enhance carbon sinks.
- Address carbon pollution from industrial process.
- Reduce non-CO_2 GHGs, including methane, hydrofluorocarbons, and other potent short-lived climate pollutants.
- Invest in innovation of affordable, reliable, and resilient clean technologies and infrastructure.

2.2 State

California has promulgated a series of executive orders, laws, and regulations aimed at reducing both the level of GHGs in the atmosphere and emissions of GHGs from commercial and private activities within the state.

65 White House Briefing Room, 2021. FACT SHEET: President Biden Sets 2030 Greenhouse Gas Pollution Reduction Target Aimed at Creating Good-Paying Union Jobs and Securing U.S. Leadership on Clean Energy Technologies. April 22, 2021. Available: https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/22/fact-sheet-president-biden-sets-2030-greenhouse-gas-pollution-reduction-target-aimed-at-creating-good-paying-union-jobs-and-securing-u-s-leadership-on-clean-energy-technologies/. Accessed October 2022.

2.2.1 California Greenhouse Gas Reduction Targets

Assembly Bill 32 (California Global Warming Solutions Act of 2006) and Senate Bill 32 (Emissions Limit)

In 2006, the California Legislature adopted Assembly Bill (AB) 32 (codified in the California Health and Safety Code [HSC], Division 25.5 – California Global Warming Solutions Act of 2006), which focuses on reducing GHG emissions in California to 1990 levels by 2020. AB 32 defines GHGs as CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6 and represents the first enforceable statewide program to limit emissions of these GHGs from all major industries with penalties for noncompliance. The law further requires that reduction measures be technologically feasible and cost effective. Under AB 32, CARB has the primary responsibility for reducing GHG emissions. AB 32 required CARB to adopt rules and regulations directing state actions that would achieve GHG emissions reductions equivalent to 1990 statewide levels by 2020.

In 2016, the California Legislature adopted Senate Bill (SB) 32 and its companion bill AB 197, and both were signed by Governor Brown to update AB 32 and include an emissions reduction's goal for the year 2030. SB 32 and AB 197 amend AB 32 and establish a new climate pollution reduction target of 40 percent below 1990 levels by 2030 and include provisions to ensure the benefits of state climate policies reach into disadvantaged communities. SB 32 suggests approaches to achieving the new reduction target, which include increasing renewable energy use, imposing tighter limits on the carbon content of gasoline and diesel fuel, putting more electric cars on the road, improving energy efficiency, and curbing emissions from key industries. The previous scoping plan, 2017 Climate Change Scoping Plan and the most recent scoping plan, the 2022 Scoping Plan for Achieving Carbon Neutrality are discussed below.

2017 Climate Change Scoping Plan

In response to the 2030 GHG reduction target, CARB adopted the 2017 Climate Change Scoping Plan (2017 Scoping Plan) in December 2017.[66] The 2017 Scoping Plan outlines the strategies the State will implement to achieve the 2030 GHG reduction target, which build on the Cap-and-Trade Regulation,[67] the LCFS,[68] improved vehicle, truck and freight movement emissions standards, increasing renewable energy, and strategies to reduce methane emissions from agricultural and other wastes by using it to meet California's energy needs. CARB's projected statewide 2030 emissions take into account 2020 GHG reduction policies and programs. The 2017 Scoping Plan also comprehensively addresses GHG emissions from natural and working lands of California, including the agriculture and forestry sectors. The adopted 2017 Scoping Plan includes ongoing and statutorily required programs and continuing the Cap-and-Trade Program.

66 CARB, *California's 2017 Climate Change Scoping Plan*, November 2017. https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping_plan_2017.pdf. Accessed October 2022.

67 Refer to Section IV.H.2.a.2f, Cap-and-Trade Program, for a detailed description of the Cap-and-Trade Program.

68 Refer to Section IV.H.2.a.2e, Senate Bill 97 (SB 97, Dutton) (Chapter 185, Statutes of 2007), for a detailed discussion of the LCFS.

This "Scoping Plan Scenario" was modified from the January 2017 Proposed Scoping Plan to reflect AB 398,[69] including removal of the 20 percent refinery measure.

CARB states that the Scoping Plan Scenario "is the best choice to achieve the state's climate and clean air goals."[70] Under the Scoping Plan Scenario, the majority of the reductions would result from the continuation of the Cap-and-Trade regulation. Additional reductions are achieved from electricity sector standards (i.e., utility providers to supply at least 50 percent renewable electricity by 2030), doubling the energy efficiency savings at end uses, additional reductions from the LCFS, implementing the short-lived GHG strategy (e.g., hydrofluorocarbons), and implementing the mobile source strategy and sustainable freight action plan. The alternatives were designed to consider various combinations of these programs, as well as consideration of a carbon tax in the event the Cap-and-Trade regulation is not continued. However, in July 2017, the California Legislature voted to extend the Cap-and-Trade regulation to 2030.

The 2017 Scoping Plan discusses the role of local governments in meeting the state's GHG reductions goals because local governments have jurisdiction and land use authority related to: community-scale planning and permitting processes, local codes and actions, outreach and education programs, and municipal operations.[71] Furthermore, local governments may have the ability to incentivize renewable energy, energy efficiency, and water efficiency measures.[72]

Under the Scoping Plan Scenario, continuation of the Cap-and-Trade regulation is expected to cover approximately 34 to 79 $MMTCO_2$ of the 2030 reduction obligation.[73] The short-lived GHG strategy is expected to cover approximately 17 to 35 $MMTCO_2e$. The RPS with 50 percent renewable electricity by 2030 is expected to cover approximately 3 $MMTCO_2$. The mobile source strategy and sustainable freight action plan includes maintaining the existing vehicle GHG emissions standards, increasing the number of zero-emissions vehicles, and improving the freight system efficiency, and is expected to cover approximately 11 to 13 $MMTCO_2$. Under the Scoping Plan Scenario, CARB expects that the doubling of the energy efficiency savings by 2030 would cover approximately 7 to 9 $MMTCO_2$ of the 2030 reduction obligation. The other strategies would be expected to cover the remaining 2030 reduction obligations.

Assembly Bill 1279 (The California Climate Crisis Act)

The Legislature enacted AB 1279[74], The California Climate Crisis Act, on September 16, 2022. AB 1279 establishes the policy of the State to achieve net zero GHG emissions, carbon

69 AB 398 was enacted in 2017 to extend and clarify the role of the state's Cap-and-Trade Program through December 31, 2030. As part of AB 398, refinements were made to the Cap-and-Trade program to establish updated protocols and allocation of proceeds to reduce GHG emissions.

70 CARB, *California's 2017 Climate Change Scoping Plan*, November 2017.

71 CARB, *California's 2017 Climate Change Scoping Plan*, November 2017.

72 CARB, *California's 2017 Climate Change Scoping Plan*, November 2017.

73 CARB, *California's 2017 Climate Change Scoping Plan*, November 2017.

74 California Legislative Information, 2022. AB-1279 The California Climate Crisis Act. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB1279. Accessed January 2023.

neutrality[75], as soon as possible, but no later than 2045 and achieve and maintain net negative GHG emissions thereafter. Additionally, AB 1279 ensures that by 2045 Statewide anthropogenic greenhouse gas emissions are reduced at least 85 percent below 1990 levels. SB 1279 also requires CARB to ensure that the Scoping Plan identifies and recommends measures to achieve carbon neutrality, and to identify and implement policies and strategies for carbon dioxide removal solutions and carbon capture, utilization, and storage technologies. It also requires CARB to submit an annual report on progress in achieving the Scoping Plan's goals.

2022 Scoping Plan for Achieving Carbon Neutrality

The 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan), adopted by CARB in December 2022, expands on prior Scoping Plans and responds to more recent legislation by outlining a technologically feasible, cost-effective, and equity-focused path to achieve the state's climate target of reducing anthropogenic emissions to 85 percent below 1990 levels and achieving carbon neutrality by 2045 or earlier.[76] The 2022 Scoping Plan outlines the strategies the state will implement to achieve carbon neutrality by reducing GHGs to meet the anthropogenic target and by expanding actions to capture and store carbon through the state's natural and working lands and using a variety of mechanical approaches. The major element of the 2022 Scoping Plan is the decarbonization of every sector of the economy. This requires rapidly moving to zero-emission transportation for cars, buses, trains, and trucks; phasing out the use of fossil gas for heating; clamping down on chemicals and refrigerants; providing communities with sustainable options such as walking, biking, and public transit to reduce reliance on cars; continuing to build out solar arrays, wind turbine capacity, and other resources to provide clean, renewable energy to displace fossil-fuel fired electrical generation; scaling up new options such as renewable hydrogen for hard-to-electrify end uses and biomethane where needed. "Successfully achieving the outcomes called for in the Scoping Plan would reduce demand for liquid petroleum by 94 percent and total fossil fuels by 86 percent by 2045 relative to 2022".[77] Despite these efforts, some amount of residual emissions will remain from hard-to-abate industries such as cement, internal combustion vehicles still on the road, and other sources of GHGs, including high global warming chemicals used as refrigerants. The 2022 Scoping Plan addresses the remaining emissions by re-envisioning natural and working lands (such as forests, shrublands/chaparral, croplands, wetlands, and other lands) to ensure they incorporate and store as much carbon as possible. Since working lands will not provide enough sequestration or carbon storage on their own to address the residual emissions, additional methods of capturing, removing, and storing carbon dioxide need to be explored, developed and deployed.

The 2022 Scoping Plan shows that the state must take unprecedented and substantial action to achieve its climate goals, far beyond anything CARB has considered in prior scoping plans. In

[75] *Carbon neutrality* means "net zero" emissions of GHGs. In other words, it means that GHG emissions generated by sources such as transportation, power plants, and industrial processes must be less than or equal to the amount of carbon dioxide that is stored, both in natural sinks and through mechanical sequestration. AB 1279 uses the terminology net zero and the 2022 Scoping Plan uses the terminology carbon neutrality or carbon neutral. These terms mean the same thing and are used interchangeably.

[76] California Air Resources Board. 2022. 2022 Scoping Plan For Achieving Carbon Neutrality, November 16. 2022 Scoping Plan Update (ca.gov). Accessed December 19, 2022.

[77] California Air Resources Board. 2022. 2022 Scoping Plan For Achieving Carbon Neutrality, November 16. 2022 Scoping Plan Update (ca.gov). Accessed December 19, 2022.

CARB's own words, the 2022 Scoping Plan "is the most comprehensive and far-reaching Scoping Plan developed to date" and "[m]odeling for this Scoping Plan shows that this decade must be one of transformation on a scale never seen before to set us up for success in 2045".[78] The 2022 Scoping Plan includes the Scoping Plan Scenario, which "builds on and integrates efforts already underway to reduce the state's GHG, criteria pollutant, and toxic air contaminant emissions by identifying the clean technologies and fuels that should be phased in as the state transitions away from combustion of fossil fuels.".[79] The 2022 Scoping Plan approaches decarbonization from two perspectives: (1) managing a phasedown of existing energy sources and technology and (2) ramping up, developing, and deploying alternative clean energy sources and technology over time.[80] Key actions to support success of the 2022 Scoping Plan include, but are not limited to:

- Transportation Sector
  - Decarbonizing the transportation sector, including transitioning to 100 percent sales of light-duty zero emission vehicles (ZEVs) by 2035 and medium- and heavy-duty vehicles by 2040; achieving a 20 percent zero emission target for the aviation sector, and developing a rapid and robust network of ZEV refueling infrastructure.
  - Ensuring that an adequate supply of zero-carbon alternative fuel which will require building the production and distribution network for zero-carbon fuels; strengthening the Cap-and-Trade Program; and increasing the stringency and scope of the Low Carbon Fuel Standard (LCFS).
  - Achieving a per capita vehicle miles traveled (VMT) reduction of at least 25 percent below 2019 levels by 2030 and 30 percent below 2019 levels by 2045 by reimagining roadway projects to decrease VMT, investing in public transit, implementing equitable roadway pricing; expanding and completing planned networks of high-quality active transportation infrastructure; deploying autonomous vehicles, ride-hailing services, and other options which have higher occupancy and low VMT; streamlining access to public transportation; and ensuring alignment of land use, housing, transportation; conservation and planning in adopted regional plans and accelerating infill development and housing production in transportation efficient places.
- Clean Electricity Grid
  - Long-term planning to support grid reliability and expansion of renewable and zero-carbon resource and infrastructure deployment; completing systemwide and local reliability assessments; facilitating resource development such as long-duration energy storage and hydrogen production; maximizing opportunities for demand response; enhancing decarbonization, reliability, and affordability in regional markets; addressing resource build-out challenges; and doubling statewide energy efficiency savings in electricity and fossil gas end uses by 2030; achieving 90 percent, 95 percent, and 100 percent renewable and zero-carbon retail sales by 2035, 2040, and 2045, respectively;

78 California Air Resources Board. 2022. 2022 Scoping Plan For Achieving Carbon Neutrality, November 16. 2022 Scoping Plan Update (ca.gov). Accessed December 19, 2022.

79 California Air Resources Board. 2022. 2022 Scoping Plan For Achieving Carbon Neutrality, November 16. 2022 Scoping Plan Update (ca.gov). Accessed December 19, 2022.

80 California Air Resources Board. 2022. 2022 Scoping Plan For Achieving Carbon Neutrality, November 16. 2022 Scoping Plan Update (ca.gov). Accessed December 19, 2022.

- Sustainable Manufacturing and Buildings
  - Using best available control technology (BACT) for stationary sources; prioritizing alternative fuel transitions and pilot projects to identify options to reduce materials and process emissions along with energy emissions in industrial manufacturing facilities; strengthening the Cap-and-Trade Program; developing infrastructure for Carbon Capture Sequestration (CCS) and hydrogen production; establishing markets for low-carbon products and recycled materials; developing a net-zero cement strategy; incentivizing the installation of energy efficiency and renewable energy technologies; evaluating the role of hydrogen in meeting GHG reduction goals; and addressing cost barriers to promote low-carbon fuels for hard-to-electrify industrial applications.
  - Achieving three million all-electric and electric-ready homes by 2030 and seven million by 2035 with six million heat pumps installed by 2030; strengthening building standards to support zero-emission new construction and developing building performance standards for existing buildings and by adopting a zero-emission standard for new space and water heaters beginning in 2030; expanding use of low-GWP refrigerants within buildings; increasing funding to decarbonize existing buildings and appliance replacements; and implementing biomethane procurement targets for investor-owned utilities.
- Carbon Dioxide Removal (CDR) and Capture
  - Incorporating CCS into other sectors, besides transportation, where cost-effective and technologically feasible options are not currently available and to achieve the 85 percent reduction in anthropogenic sources below 1990 levels; addressing market barriers for CCS and CDR; evaluating the role for CCS in cement decarbonization; supporting carbon management infrastructure projects; exploring carbon capture applications; consider carbon capture infrastructure when developing hydrogen roadmaps; and streamlining permitting barriers to project implementation.
- Short-Lived Climate Pollutants (Non-Combustion Gases)
  - Installing anaerobic digesters, maximizing biomethane capture, and directing biomethane to sectors that are hard to decarbonize or as a feedstock for energy; increasing alternative manure management projects; implementing enteric fermentation strategies; accelerating demand for diary and livestock product substitutes such as plant-based or cell-cultured dairy and livestock products to achieve reductions in animal populations; and deploying methane migration strategies and developing regulations to ensure that the 2030 target is achieved.
  - Maximizing and expanding existing infrastructure to reduce landfill disposal; expanding markets for products made from organic waste; recovering edible food to combat food insecurity; infrastructure to support organic recycling; and directing biomethane captured from landfills and organic waste digesters to sectors that are hard to decarbonize.
  - Mitigating emissions from leaks; utilizing zero emission equipment alternatives wherever feasible; identifying and addressing methane leaks form oil infrastructure near communities; minimizing emission from equipment that must vent fossil gas by design; installing vapor collection systems on high emitting equipment; phasing out venting and routine flaring of associated gas; reducing pipeline and compressor blowdown emissions; utilizing remote sensing capability to mitigate leaks.
  - Expanding the use of very low- or no-GWP technologies in all hydrofluorocarbon (HFC) end-use sectors; converting large HFC emitters such as existing refrigeration systems to

the lowest practical GWP technologies; and improving recovery, reclamation, and reuse of refrigerants by limiting sales of new or virgin high-GWP refrigerants and requiring the use of reclaimed refrigerants.

  - Reducing fuel combustion from reductions in transportation emissions and agricultural equipment emissions and investing in residential woodsmoke reduction.

- Natural and Working Lands (NWL)
  - Increasing climate smart forest, shrubland, and grassland management to at least 2.3 million acres a year−an approximately 10-fold increase from current levels; increasing climate smart agricultural practices by at least 78,000 acres adopted a year, annually conserving at least 8,000 acres a year of croplands, and increasing organic agriculture to comprise at least 20 percent of cultivated acres by 2045−an approximately 7.5-fold increase in healthy soils practices from previous levels and a 2-fold increase in total acres of organic agriculture; increasing annual investment in urban trees in developed lands by at least 200 percent above historic levels and establishing defensible space on all parcels by 2045; restoring at least 60,000 acres, or approximately 15 percent of all Sacramento-San Joaquin River Delta wetlands by 2045; and cutting land conversion of deserts and sparsely vegetated landscapes by at least 50 percent annually from current levels, starting in 2025.
  - Establishing and expanding mechanism that ensure NWL are protected from land conversion and parcelization and pairing land conservation projects with management plans that increase carbon sequestration.
  - Accelerating the pace and scale of climate smart forest management to at least 2.3 million acres annually by 2025; establishing and expanding mechanisms that ensure forests, shrublands, and grasslands are protected from land conversion; accelerating the deployment of long-term carbon storage from waste woody biomass residues; expanding infrastructure to facilitate processing of biomass; and streamlining permitting to accelerate implementation of climate smart forest management.
  - Establishing and expanding mechanisms that ensure grasslands are protected from conversion/parcelization and that support ongoing management actions that improve carbon sequestration and to deliver waste diversion goals through nature-based solutions.
  - Accelerating healthy soils practices to 80,000 acres annually by 2025, conserving at least 8,000 acres of annual crops annually, and increasing organic agriculture to 20 percent of all cultivated acres by 2045; accelerating deployment of healthy soils practices, organic farming, and climate smart agriculture practices.
  - Restoring 60,000 acres of Delta wetlands annually by 2045 to reduce methane emissions from wetlands and reverse the resulting subsidence.
  - Increasing urban forestry investment annually by 200 percent relative to business as usual.
  - Establishing and expanding mechanisms that ensure sparsely vegetated lands are protected from conversion.

Under the Scoping Plan Scenario, the demand for liquid petroleum would decrease by 94 percent and total fossil fuels by 86 percent in 2045 relative to 2022.[81] Unfortunately, some residual

[81] California Air Resources Board. 2022. Final Environmental Analysis for the 2022 Scoping Plan for Achieving Carbon Neutrality. scoping plan (ca.gov). Accessed December 20, 2022.

emissions would remain from hard-to-abate industries such as cement, internal combustion vehicles still on the road, and other sources of GHGs, including high global warming chemicals used as refrigerants.[82] The 2022 Scoping Plan addresses these remaining emissions through increased sequestration rates in NWL. However, the 2022 Scoping Plan modeling indicates that NWL, on their own, will not provide enough sequestration and storage to address all the residual emissions so it will be necessary to research, develop, and deploy additional methods of capturing CO_2 that include pulling it from smokestacks of facilities, or drawing it out of the atmosphere itself and then safely and permanently utilizing and storing it.[83] Additionally, carbon removal will be necessary to achieve net negative emissions to address historical GHGs already in the atmosphere.[84] The 2022 Scoping Plan does not specify how the residual emissions will be removed, as this will require new CCS and DAC technologies to be developed which will need governmental or other incentive support to overcome technology and market barriers.[85]

The 2022 Scoping Plan also discusses the role of local governments in meeting the state's GHG reductions goals because local governments have jurisdiction and land use authority related to community-scale planning and permitting processes, local codes and actions, outreach and education programs, and municipal operations. Local governments' efforts to reduce GHG emissions within their jurisdictions are critical to achieving the State's long-term climate goals. Furthermore, local governments make critical decisions on how and when to deploy transportation infrastructure and can choose to support transit, walking, bicycling, and neighborhoods that allow people to transition away from cars; they can adopt building ordinances that exceed statewide building code requirements; and they play a critical role in facilitating the rollout of ZEV infrastructure.[86] The 2022 Scoping Plan encourages local governments to take ambitious, coordinated climate action at the community scale; action that is consistent with and supportive of the state's climate goals.[87] These could include:

- Developing local CAPS and strategies consistent with the State's GHG emission reduction goals.
- Incorporating State-level GHG priorities into their processes for approving land use and individual plans and individual projects.
- Implementing CEQA mitigation, as needed, to reduce GHG emissions associated with new land use development projects, and
- Leveraging opportunities for regional collaboration.

82 California Air Resources Board. 2022. Final Environmental Analysis for the 2022 Scoping Plan for Achieving Carbon Neutrality. scoping plan (ca.gov). Accessed December 20, 2022.

83 California Air Resources Board. 2022. Final Environmental Analysis for the 2022 Scoping Plan for Achieving Carbon Neutrality. scoping plan (ca.gov). Accessed December 20, 2022.

84 California Air Resources Board. 2022. Final Environmental Analysis for the 2022 Scoping Plan for Achieving Carbon Neutrality. scoping plan (ca.gov). Accessed December 20, 2022.

85 California Air Resources Board. 2022. Final Environmental Analysis for the 2022 Scoping Plan for Achieving Carbon Neutrality. scoping plan (ca.gov). Accessed December 20, 2022.

86 California Air Resources Board. 2022. 2022 Scoping Plan For Achieving Carbon Neutrality, November 16. 2022 Scoping Plan Update (ca.gov). Accessed December 19, 2022.

87 California Air Resources Board. 2022. 2022 Scoping Plan For Achieving Carbon Neutrality, November 16. 2022 Scoping Plan Update (ca.gov). Accessed December 19, 2022.

Executive Order B-30-15

On April 29, 2015, Governor Brown issued Executive Order B-30-15[88], which involved the following:

- Established a new interim statewide reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030.
- Ordered all State agencies with jurisdiction over sources of GHG emissions to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 reduction targets.
- Directed CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent.

Executive Order B-55-18

Executive Order B-55-18[89] was signed by Governor Brown on September 10, 2018. The order establishes an additional statewide policy to achieve carbon neutrality, which CARB defines as meaning "… that all GHG emissions emitted into the atmosphere are balanced in equal measure by GHGs that are removed from the atmosphere, either through carbon sinks or carbon capture and storage,"[90] by 2045 and maintain net negative emissions thereafter. As per Executive Order B-55-18, CARB is directed to work with relevant State agencies to develop a framework for implementation and accounting that tracks progress toward this goal and to ensure that future climate change scoping plans identify and recommend measures to achieve the carbon neutrality goal. California is making progress towards the 2045 goal; however, the pathway to carbon neutrality is still under development. According to CARB, the framework will include a strong reliance on energy efficiency, electrification, low carbon fuels (including low-carbon electricity), and CO_2 removal in future policies and strategies for reaching the ambitious goal.[91] The path to carbon neutrality lies in striving for zero emissions from all new sources and maximum sequestration to offset existing sources.

Senate Bill 905, Carbon Capture Removal, Utilization, and Storage Program

The Legislature enacted SB 905[92] on September 16, 2022. SB 905 requires CARB to establish the Carbon Capture, Removal, Utilization, and Storage Program to evaluate, demonstrate, and regulate carbon capture, utilization, and sequestration (CCUS) and carbon dioxide removal

88 Office of the Governor Edmund G. Brown Jr., Governor Brown Establishes Most Ambitious Greenhouse Gas Reduction Target in North America, April 29, 2015. https://www.ca.gov/archive/gov39/wp-content/uploads/2018/09/9.10.18-Executive-Order.pdf. Accessed October 2022.

89 State of California Executive Department, Executive Order B-55-18 to Achieve Carbon Neutrality. https://ww2.arb.ca.gov/sites/default/files/2020-10/e3_cn_final_report_oct2020_0.pdf. Accessed October 2022.

90 E3, Achieving Carbon Neutrality in California, PATHWAYS Scenarios Developed for the California Air Resources Board, October 2020, https://ww2.arb.ca.gov/sites/default/files/2020-10/e3_cn_final_report_oct2020_0.pdf. Accessed October 2022.

91 E3, Achieving Carbon Neutrality in California, PATHWAYS Scenarios Developed for the California Air Resources Board, October 2020.

92 California Legislative Information, 2022. SB-905 Carbon sequestration: Carbon Capture, Removal, Utilization, and Storage Program. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB905. Accessed January 2023.

(CDR) project and technology. On or before January 1, 2025, CARB must adopt regulations creating a unified permitting application for approval of CCUS and CDR projects which would expedite the permitting process and other authorizations for the construction and operation of these projects. SB 906 also authorizes CARB to develop a centralized database to track the deployment of CCUS and CDR technologies and projects. Additionally, SB 905 requires the Secretary of the Natural Resources Agency to publish framework for governing agreements for two or more trats of land overlying the same geologic storage reservoir for the purposes of a carbon sequestration project.

Senate Bill 1137, Oil and Gas Operations; Location Restrictions; Notice of Intention; Health Protection Zone; Sensitive Receptors

SB 1137[93] prohibits the development of new oil and gas wells or infrastructure in health protection zones, as defined, except for purposes of public health and safety or other limited exceptions. The bill requires operators of existing oil and gas wells or infrastructure within health protection zones to undertake specified monitoring, public notice, and nuisance requirements. The bill requires CARB to consult and concur with the California Geologic Energy Management Division (CalGEM) on leak detection and repair plans for these facilities, adopt regulations as necessary to implement emission detection system standards, and collaborate with CalGEM on public access to emissions detection data.

Assembly Bill 1757, California Global Solutions act of 2006; Climate Goal; Natural and Working Lands

AB 1757[94] requires the California Natural Resources Agency (CNRA), by January 1, 2024, in collaboration with CARB, the California Environmental Protection Agency (CalEPA), the California Department of Food and Agriculture (CDFA), and an expert advisory committee, to set targets for natural carbon sequestration and nature-based climate solutions for 2030, 2038, and 2045, which must be integrated into the Scoping Plan and other State policies. CARB must ensure that double counting of emissions reductions is avoided and emissions reduction projects and actions that receive State funding will not be eligible to generate credits under any market-based compliance mechanism. CARB, by January 1, 2025, must develop standard methods for State agencies to track GHG emissions and reductions, carbon sequestration, and, where feasible, additional benefits from natural and working lands over time. CNRA, by January 1, 2025, in collaboration with CARB, CalEPA, and CDFA, must review and update the Climate Smart Strategy to achieve the targets and post data on its website on progress made toward targets, including on State expenditures made to implement the targets.

93 California Legislative Information, 2022. SB-1137 Oil and gas: operations: local restrictions: notice of intention: health protection zone: sensitive receptors. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB1137. Accessed January 2023.

94 California Legislative Information, 2022. AB-1757 California Global Warming Solutions Act of 2006: climate goal: natural and working lands. https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220AB1757. Accessed January 2023.

Senate Bill 1206, Hydrofluorocarbon Gases; Sale or Distribution

SB 1206[95] prohibits the sale or distribution of bulk hydrofluorocarbon gases (HFCs) or bulk blends contain HFCs that exceed 2,200 GWP in 2025, 1,4000 GWP in 2030, and 750 GWP in 2033, unless the HFCs are reclaimed or for use in medical metered dose inhalers. SB 1206 also requires the state to use reclaimed refrigerant with a GWP greater than 750 to service existing equipment owned/operated by the State starting in 2025. Additionally, SB 1206, requires CARB to initiate a rulemaking requiring low- and ultra-low GWP alternatives to HFCs in all sectors where it is practicable for entities in the sector to comply with the requirement.

Senate Bill 27, Carbon Sequestration; State Goals; Natural and Working Lands; Registry of Projects

SB 27[96] requires CNRA, in coordination with other state agencies, to establish the Natural and Working Lands Climate Smart Strategy by July 1, 2023. SB 27 also requires CARB to establish specified CO_2 removal targets for 2030 and beyond as part of its Scoping Plan. Under SB 27, CNRA is to establish and maintain a registry to identify projects in the state that drive climate action on natural and working lands and are seeking funding. CNRA also must track carbon removal and GHG emission reduction benefits derived from projects funded through the registry. This bill is reflected in the 2022 Scoping Plan as CO_2 removal and carbon capture targets of 20 $MMTCO_2e$ by 2030 and 100 $MMTCO_2e$ by 2045 in support of carbon neutrality.

Senate Bill 596, Greenhouse Gases; Cement Sector; Net-zero Emissions Strategy

SB 596[97] requires CARB, by July 1, 2023, to develop a comprehensive strategy for the state's cement sector to achieve net-zero-emissions of GHGs associated with cement used within the state as soon as possible, but no later than December 31, 2045. The bill establishes an interim target of 40 percent below the 2019 average GHG intensity of cement by December 31, 2035. Under SB 596, CARB must: (1) define a metric for GHG intensity and establish a baseline from which to measure GHG intensity reductions, (2) evaluate the feasibility of the 2035 interim target (40 percent reduction in GHG intensity) by July 1, 2028, (3) coordinate and consult with other state agencies, (4) prioritize actions that leverage state and federal incentives, and (5) evaluate measures to support market demand and financial incentives to encourage the production and use of cement with low GHG intensity.

Senate Bill 1383

This bill (Chapter 395, Statutes of 2016) creates goals for short-lived climate pollutant (SLCP) reductions in various industry sectors. The SLCPs included under this bill – including methane, fluorinated gases, and black carbon – are GHGs that are much more potent than carbon dioxide and

95 California Legislative Information, 2022. SB-1206 Hydrofluorocarbon gases: sale or distribution. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB1206. Accessed January 2023.

96 California Legislative Information, 2022. SB-27 Carbon sequestration: state goals: natural and working lands; registry of projects. https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220SB27. Accessed January 2023.

97 California Legislative Information, 2022. SB-596 Greenhouse gases: cement sector: net-zero emissions strategy. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB596. Accessed January 2023.

can have detrimental effects on human health and climate change. SB 1383 requires the CARB to adopt a strategy to reduce methane by 40 percent, hydrofluorocarbon gases by 40 percent, and anthropogenic black carbon by 50 percent below 2013 levels by 2030. The methane emission reduction goals include a 75 percent reduction in the level of statewide disposal of organic waste from 2014 levels by 2025. In 2017, CARB adopted a SLCP Reduction Strategy to implement SB 1383.[98]

Executive Order N-79-20

Executive Order N-79-20[99] was signed by Governor Newsom on September 23, 2020. The order directs CARB to develop and propose regulations that would require a ramp up to 100 percent in-state sales of new zero-emissions passenger vehicles (cars and trucks) and drayage trucks by 2035. The Executive Order further directs CARB to promulgate regulations that would require a ramp up to 100 percent in-state sales of medium- and heavy-duty trucks by 2045 "for all operations where feasible." The Executive Order also instructs CARB to develop and propose "strategies" (as opposed to regulations) to achieve zero emissions from off-road vehicles and equipment operations in the state by 2035. The order also directs State agencies to take a number of actions focused on the oil and gas industry, including, but not limited to, a direction to CARB to strengthen and extend the LCFS program beyond 2030.

2.2.2 Land Use and Transportation Planning

SB 375, signed in September 2008 (Chapter 728, Statutes of 2008), aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocation. SB 375 requires metropolitan planning organizations (MPOs) to adopt a sustainable communities strategy (SCS) or alternative planning strategy (APS) that would prescribe land use allocation in that MPOs regional transportation plan. CARB, in consultation with MPOs, will provide each affected region with reduction targets for passenger car and light truck regional emissions for 2020 and 2035. Reduction targets are updated every eight years; but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets. CARB is also charged with reviewing each MPO's SCS or APS for consistency with its assigned targets. If MPOs do not meet the GHG reduction targets, transportation projects may be ineligible for funding programmed after January 1, 2012. Kern Council of Governments (KCOG) is the MPO for the region in which the project site is located. In addition, on September 223, 2010, CARB adopted the GHG emissions reduction targets of 5 percent per capita reduction by 2020 and 10 percent per capita reduction by 2035 relative to 2005 levels for KCOG.[100] Under SB 375, the reduction target must be incorporated within that region's Regional Transportation Plan (RTP), which is used for long-term transportation planning, in a Sustainable Communities Strategy (SCS). Certain transportation planning and programming activities would then need to be consistent with the SCS; however, SB 375 expressly provides that the SCS does not regulate

98 CARB, Short-Lived Climate Pollutant Reduction Strategy, March 2017. https://ww2.arb.ca.gov/sites/default/files/2020-07/final_SLCP_strategy.pdf. Accessed October 2022.

99 State of California Executive Department, September 23, 2020. Executive Order N-79-20. https://www.gov.ca.gov/wp-content/uploads/2020/09/9.23.20-EO-N-79-20-Climate.pdf. Accessed October 2022.

100 CARB, Executive Order G-19-203 Kern Council of Governments 2018 Sustainable Communities Strategy CARB Acceptance of GHG Quantification Determination, July 24, 2020. https://ww2.arb.ca.gov/sites/default/files/2020-07/Kern_COG_2018_SCS_Acceptance_of_GHG_Quantification_Determination_Executive_Order.pdf. Accessed October 2022.

the use of land, and further provides that local land use plans and policies (e.g., general plan) are not required to be consistent with either the RTP or SCS.

On August 16, 2018, KCOG adopted the 2018 Regional Transportation Plan and Sustainable Communities Strategy (2018 RTP/SCS),[101] which is an update to the previous 2014 RTP/SCS. The RTP/SCS seeks to: improve economic vitality, improve air quality, improve the health of communities, improve transportation and public safety, promote the conservation of natural resources and undeveloped land, increase regional access to community services, increase regional and local energy independence and increase opportunities to help shape the communities' future, while successfully achieving the GHG-emission-reduction targets set by CARB. CARB approved that the KCOG 2018 RTP/SCS would achieve the 2020 and 2035 GHG reduction targets.[102]

KCOG adopted the 2022 RTP/SCS[103] on December 16, 2022. The 2022 RTP/SCS contains CARBs GHG reduction targets of 9 percent per capita by 2020 and 15 percent per capita by 2035 as compared to 2005 level (changed from the previous reduction targets, discussed above, effective October 1, 2018[104]). The Kern region has outperformed the 2020 state GHG target and this plan shows that they are on target to achieve the 2035 target. The following strategy areas will be implemented to meet the 2035 target:

- A forecasted development pattern to accommodate the region's future transportation, employment, and housing needs, while promoting conservation of natural resources and open space areas.
- A transportation network comprising well-maintained public transit, local streets and roads, managed lanes and highways, and bikeways and walkways.
- Strategies to manage demands on the region's transportation roadway system (also known as transportation demand management, or TDM) in ways that reduce or eliminate traffic congestion during peak periods of demand.
- Strategies to manage operations of the region's transportation system (also known as transportation system management, or TSM) to maximize the efficiency of the network and reduce congestion.

Implementation of the 2022 RTP/SCS is anticipated to achieve a 10.8 percent reduction in 2020, 15.1 percent in 2035 relative to 2005, which would exceed CARBs GHG reduction targets.[105]

[101] Kern Council of Governments, 2018 Regional Transportation Plan and Sustainable Communities Strategy, August 16, 2018. https://www.kerncog.org/wp-content/uploads/2018/10/2018_RTP.pdf. Accessed October 2022.

[102] CARB Executive Order G-19-203 Kern Council of Governments 2018 Sustainable Communities Strategy CARB Acceptance of GHG Quantification Determination, July 24, 2020. https://ww2.arb.ca.gov/sites/default/files/2020-07/Kern_COG_2018_SCS_Acceptance_of_GHG_Quantification_Determination_Executive_Order.pdf. Accessed October 2022.

[103] Kern Council of Governments, 2022 Regional Transportation Plan and Sustainable Communities Strategy, July 21, 2022. https://www.kerncog.org/category/docs/rtp/. Accessed October 2022.

[104] CARB Regional Plan Targets, SB 375 Regional Plan Climate Targets, 2022. https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets. Accessed October 2022.

[105] Kern Council of Governments, 2022 Regional Transportation Plan and Sustainable Communities Strategy, July 21, 2022.

2.2.3 Transportation Sector

In response to the transportation sector accounting for a large percentage of California's CO_2 emissions, AB 1493 (HSC Sections 42823 and 43018.5) (also referred to as the Pavley standards) enacted on July 22, 2002, required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles whose primary use is non-commercial personal transportation manufactured during and after 2009. In setting these standards, CARB must consider cost effectiveness, technological feasibility, economic impacts, and provide maximum flexibility to manufacturers.

The federal Clean Air Act ordinarily preempts state regulation of motor vehicle emissions standards; however, California is allowed to set its own standards with a federal Clean Air Act waiver from USEPA. In August 2012, USEPA and the U.S. Department of Transportation adopted GHG emissions standards for model year 2017–2025 vehicles, which corresponds to the state's Pavley standards; however, these standards were rescinded and replaced under the federal SAFE Vehicles Rule. As mentioned above, California, 22 other states, and the District of Columbia filed a petition for review of the final rule on May 27, 2020. Also, on January 20, 2021, President Biden signed EO 13990, directing the government to revise fuel economy standards with the goal of further reducing emissions. On April 22, 2021, NHTSA proposed to formally roll back portions of the SAFE Vehicles Rule, thereby restoring California's right to set more stringent fuel efficiency standards.

In January 2007, Governor Brown signed EO S-01-07, which mandates the following actions: (1) establish a statewide goal to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020; and (2) adopt a Low Carbon Fuel Standard for transportation fuels in California. CARB identified the Low Carbon Fuel Standard as one of the nine discrete early actions in the Climate Change Scoping Plan. In 2018, CARB amended the Low Carbon Fuel Standard to strengthen and smooth the carbon intensity benchmarks through 2030 in line with California's 2030 GHG emissions reduction target enacted through SB 32.

California Air Resources Board

CARB is responsible for the coordination and administration of both federal and state air pollution control programs in California. Some of the regulations and measures that CARB has adopted to reduce particulate matter, nitrogen oxides, and other emissions have the co-benefits of reducing GHG emissions. Regulations and measures include:

- In 2012, CARB approved the Advanced Clean Cars Program (CARB 2021), which includes low-emission-vehicle regulations that reduce criteria pollutant and GHG emissions from light- and medium-duty vehicles, and the zero-emissions vehicle (ZEV) regulation, which requires manufacturers to produce an increasing number of pure ZEVs (meaning battery electric and fuel cell electric vehicles), with provisions to also produce plug-in hybrid electric vehicles in the 2018–2025 model years. The program aims to reduce smog-forming pollution from passenger vehicles by 75 percent by 2025, with the ultimate goal of total fleet electrification and elimination of tailpipe emissions. CARB is in the process of establishing the next set of low-emission-vehicle and ZEV requirements to contribute to meeting federal ambient air quality ozone standards and California's carbon neutrality targets (CARB 2021).

- In 2022, CARB approved the Advanced Clean Cars II Program (CARB 2022e), for model years 2026 through 2035, which requires that all new passenger cars, trucks and SUVs sold in California be zero emissions by 2035. The regulation amends the Zero-emission Vehicle (ZEV) Regulation to require an increasing number of ZEVs, and relies on advanced vehicle technologies, including battery-electric, hydrogen fuel cell electric and plug-in hybrid electric-vehicles, to meet air quality and climate change emissions standards, in support of EO N-79-20 (CARB 2022e). This Program also amended the Low-emission Vehicle Regulations to include increasingly stringent standards for gasoline cars and heavier passenger trucks to continue to reduce smog-forming emissions. By increasing the number of ZEVs on the road and continuing to clean up conventional internal combustion vehicles, the regulations will reduce exposure to vehicle pollution in communities throughout California, including in frontline communities that are disproportionately exposed to vehicular pollution.
- In 2004, CARB adopted an Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling, to reduce public exposure to diesel particulate matter and other toxic air contaminants (13 CCR Section 2485). This measure generally prohibits diesel-fueled commercial vehicle idling for more than five minutes at any given location, with certain exemptions for equipment in which idling is a necessary function, such as concrete trucks.
- In 2008, CARB approved the Truck and Bus regulation to reduce particulate matter and nitrogen oxide emissions from existing diesel vehicles operating in California (13 CCR Section 2025[h]).
- In 2007, CARB promulgated emission standards for off-road diesel construction equipment of greater than 25 horsepower such as bulldozers, loaders, backhoes, and forklifts, as well as many other self-propelled off-road diesel vehicles. The regulation aims to reduce emissions by installation of diesel soot filters and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission-controlled models.

While these regulations primarily target reductions in criteria air pollutant emission, they have the co-benefits of minimizing GHG emissions due to improved engine and fuel efficiencies and reduction of idling times.

2.2.4 Energy Sector

Title 24 of the California Code of Regulations is the California Building Code. It governs all aspects of building construction. Part 6 of the Building Code includes standards mandating energy efficiency measures in new construction. The CEC first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR, Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the state. Although these standards were not originally intended to reduce GHG emissions, increased energy efficiency and reduced consumption of electricity, natural gas, and other fuels would result in fewer GHG emissions from residential and nonresidential buildings subject to the standard. The standards are updated periodically (typically every three years) to allow for the consideration and inclusion of new energy efficiency technologies and methods. The 2022 update to the Title 24 standards became effective January 1, 2023.

The Energy Efficiency Standards for Residential and Nonresidential Buildings focuses on several key areas to improve the energy efficiency of renovations and addition to existing buildings as well as newly constructed buildings and renovations and additions to existing buildings. The most

significant efficiency improvements to the residential Standards include the encouragement of electric heat pumps, expands solar photovoltaic (PV) and battery storage standards, establishes electric-ready requirements for new homes, and improvements for attics, walls, water heating, ventilation, and lighting. [106] The most significant efficiency improvements to the nonresidential Standards include alignment with the ASHRAE 90.1 2017 national standards, battery storage standards, and strengthens ventilation standards. The 2022 updates to the Title 24 standards also include changes made throughout all of its sections to improve the clarity, consistency, and readability of the regulatory language. Furthermore, the standards require that enforcement agencies determine compliance with state regulations (24 CCR Part 6) before issuing building permits for any construction.[107]

Part 11 of the Title 24 Building Energy Efficiency Standards is referred to as the California Green Building Standards (CALGreen) Code. The purpose of the CALGreen Code is to "improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air quality."[108] The CALGreen Code is not intended to substitute for or be identified as meeting the certification requirements of any green building program that is not established and adopted by the California Building Standards Commission. As of January 1, 2011, the CALGreen Code is mandatory for all new buildings constructed in the State and establishes mandatory measures for new residential and non-residential buildings. Such mandatory measures include energy efficiency, water conservation, material conservation, planning and design and overall environmental quality.[109] The CALGreen Code was most recently updated in 2022 to include new mandatory measures for residential as well as nonresidential uses; the new measures took effect on January 1, 2023.

The State has adopted regulations to increase the proportion of electricity from renewable sources. On September 10, 2018, Governor Brown signed SB 100, which increased California's RPS from 33 percent by 2020 renewable resources to 50 percent by December 31, 2026, and 60 percent by December 31, 2030, while requiring retail sellers and local publicly owned electric utilities to procure eligible renewable electricity for 44 percent of retail sales by December 31, 2024, 52 percent by December 31, 2027, and 60 percent by December 31, 2030. In addition, SB 100 requires that CARB plan for 100 percent eligible renewable energy resources and zero-carbon resources by December 31, 2045. Electricity providers, including the provider for the project site, SCE, is required to update future plans to meet applicable SB 100 requirements.

Senate Bill 1020, Clean Energy, Jobs, and Affordability Act of 2022, approved September 16, 2022, revises SB 100, to require that eligible renewable energy resources and zero-carbon

[106] CEC, *2022 Building Energy Efficiency Standards*, August 11, 2021. https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency. Accessed October 2022.

[107] CEC, *2022 Building Energy Efficiency Standards*, August 11, 2021. https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency. Accessed October 2022..

[108] California Building Standards Commission, *2022 California Green Building Standards Code*, 2022. Codes (ca.gov). Accessed October 2022.

[109] California Building Standards Commission, *2022 California Green Building Standards Code*, 2022.

resources supply 90 percent of all retail sales of electricity to end use customers by December 31, 2035, 95 percent of all retail sales to end users by December 31, 2040, and 100 percent of all retail sales to end users by December 31, 2045, and 100 percent of electricity procured to serve all state agencies by December 31, 2035.[110]

On September 16, 2022, Governor Gavin Newsom signed SB 1075, Hydrogen: green hydrogen: emissions of greenhouse gases, which requires CARB, CEC, California Public Utilities Commission (CPUC), and the California Workforce Development Board to conduct an evaluation on hydrogen by June 1, 2024, including policy recommendations to accelerate the production and use of hydrogen, and specifically green hydrogen, and its role in decarbonizing the electrical and transportation sectors.[111]

2.2.5 Senate Bill 1389

Senate Bill (SB) 1389 (Public Resources Code Sections 25300–25323; SB 1389) requires the CEC to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing the state's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the state's economy; and protect public health and safety (Public Resources Code Section 25301[a]). The 2021 Integrated Energy Policy Report[112], the latest published report from CEC, provides the results of the CEC's assessments related to energy sector trends, building decarbonization, energy reliability, decarbonizing California's gas system, the California energy demand forecast, and quantifying the benefits of the Clean Transportation Program.

2.2.6 Senate Bill 350

SB 350, signed October 7, 2015, is the Clean Energy and Pollution Reduction Act of 2015. The objectives of SB 350 are: (1) to increase the procurement of electricity from renewable sources from 33 percent to 50 percent; and (2) to double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.

2.2.7 Cap-and-Trade Program

The Climate Change Scoping Plan identifies a Cap-and-Trade Program as a key strategy CARB employed to help California meet its GHG reduction targets for 2020 and will continue to assist in the efforts to achieve the GHG reduction goals in 2030, and potentially beyond. Pursuant to its authority under AB 32, CARB has designed and adopted a California Cap-and-Trade Program to reduce GHG emissions from major sources (deemed "covered entities") by setting a firm cap on statewide GHG emissions and employing market mechanisms to achieve AB 32's emission-

[110] California Legislative Information, 2022. SB-1020 Clean Energy, Jobs, and Affordability Act of 2022. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB1020, Accessed January 2023.

[111] California Legislative Information, 2022. SB-1075 Hydrogen: green hydrogen: emissions of greenhouse gases. https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220SB1075. Accessed January 2023.

[112] CEC, *2021 Integrated Energy Policy Report Highlights*, April 5, 2022. https://efiling.energy.ca.gov/GetDocument.aspx?tn=242559. Accessed October 2022.

reduction mandate of returning to 1990 levels of emissions by 2020 (17 CCR Sections 95800 to 96023).

Under the Cap-and-Trade Program, an overall limit is established for GHG emissions from capped sectors (e.g., electricity generation, petroleum refining, cement production, and large industrial facilities that emit more than 25,000 metric tons CO_2e per year [MT CO_2e/year]) and declines over time, and facilities subject to the cap may trade permits to emit GHGs. The statewide cap for GHG emissions from the capped sectors commenced in 2013 and declines over time, achieving GHG emission reductions throughout the Program's duration (17 CCR Sections 95811, 95812). On July 17, 2017 the California legislature passed Assembly Bill 398, extending the Cap-and-Trade Program through 2030.

The Cap-and-Trade Program provides a firm cap, ensuring that the 2020 and 2030 statewide emission limits will not be exceeded. An inherent feature of the Cap-and-Trade Program is that it does not guarantee GHG emissions reductions in any discrete location or by any particular source. Rather, GHG emissions reductions are only guaranteed on an accumulative basis. In other words, as climate change is a global occurrence and the effects of GHG emissions are considered cumulative in nature, a focus on aggregate GHG emissions reductions, rather than source-specific reductions, is warranted.

If California's direct regulatory measures reduce GHG emissions more than expected, then the Cap-and-Trade Program will be responsible for relatively fewer emissions reductions. If California's direct regulatory measures reduce GHG emissions less than expected, then the Cap-and-Trade Program will be responsible for relatively more emissions reductions. In sum, the Cap-and-Trade Program will achieve aggregate, rather than site-specific or project-level, GHG emissions reductions. Also, due to the regulatory framework adopted by CARB, the reductions attributed to the Cap-and-Trade Program can change over time depending on the state's emissions forecasts and the effectiveness of direct regulatory measures.

With the passage of AB 1279, the state has a statutory target to achieve carbon neutrality by 2045 and it is clear that additional GHG reductions will be required over this decade to achieve the accelerated 2030 target.[113] This will require changes to all major programs to increase their stringency between now and 2030 resulting in reductions in GHG emissions. As these GHG reductions increase, there will be less reliance on the Cap-and-Trade Program to "fill the gap" to meet the accelerated 2030 reduction target. Since the timing of major program changes is uncertain, the Cap-and-Trade Program must continue to be able to scale across a range of possibilities, including potential program design and annual cap changes.[114]

2.2.8 California Environmental Quality Act

In accordance with CEQA and Appendix F, Energy Conservation, of the State CEQA Guidelines, and to assure that energy implications are considered in project decisions, EIRs are required to

[113] California Air Resources Board. 2022. 2022 Scoping Plan For Achieving Carbon Neutrality, November 16. 2022 Scoping Plan Update (ca.gov). Accessed December 19, 2022.

[114] California Air Resources Board. 2022. 2022 Scoping Plan For Achieving Carbon Neutrality, November 16. 2022 Scoping Plan Update (ca.gov). Accessed December 19, 2022.

include a discussion of the potential significant energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. In addition, while not described or required as significance thresholds for determining the significance of impacts related to energy, Appendix F provides the following topics for consideration in the discussion of energy use in the CEQA Compliance Checklist as well as in the supporting documentation to the extent the topics are applicable or relevant to the proposed project:

The proposed project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the including construction, operation, maintenance, and/or removal. If appropriate, the energy intensiveness of materials may be discussed;

- The effects of the project on local and regional energy supplies and on requirements for additional capacity;
- The effects of the project on peak and base period demands for electricity and other forms of energy;
- The degree to which the project complies with existing energy standards;
- The effects of the project on energy resources; and
- The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

2.2.9 Senate Bill 97 (SB 97, Dutton) (Chapter 185, Statutes of 2007)

SB 97 (Chapter 185, Statutes of 2007), enacted in 2007, directed the California Office of Planning and Research (OPR) to develop CEQA Guidelines "for the mitigation of GHG emissions or the effects of GHG emissions." In December 2009, OPR adopted amendments to the CEQA Guidelines (Guidelines Amendments), Appendix G, Environmental Checklist, which created a new resource section for GHG emissions and indicated criteria that may be used to establish significance of GHG emissions (California Code of Regulations [CCR] Title 14, Section 15064.4).

However, neither a threshold of significance nor any specific mitigation measures are included or provided in the Guidelines Amendments. The Guidelines Amendments require a lead agency to make a good-faith effort, based on scientific and factual data to the extent possible, to describe, calculate, or estimate the amount of GHG emissions resulting from a project. The Guidelines Amendments give discretion to the lead agency and allow the lead agency to choose whether to: (1) quantify GHG emissions resulting from a project; and/or (2) rely on a qualitative analysis or performance-based standards. Furthermore, the Guidelines Amendments identify three factors that should be considered in the evaluation of the significance of GHG emissions:

1. The extent to which a project may increase or reduce GHG emissions as compared to the existing environmental setting;
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and

3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

The administrative record for the Guidelines Amendments also clarifies "that the effects of GHG emissions are cumulative and should be analyzed in the context of California Environmental Quality Act's requirements for cumulative impact analysis."[115]

2.3 Regional

2.3.1 Eastern Kern Air Pollution Control District

The project site is located within the Mojave Desert Air Basin (Basin), which encompasses the desert portions of Kern, Los Angeles, Riverside, and San Bernardino Counties. The Basin has four air districts which regulate air quality. The project site lies within the Eastern Kern Air Pollution Control District (EKAPCD). EKAPCD is responsible for air quality planning in its portion of the Basin and developing rules and regulations to bring the area into attainment of the ambient air quality standards. This is accomplished though air quality monitoring, evaluation, education, implementation of control measures to reduce emissions from stationary sources, permitting and inspection of pollution sources, enforcement of air quality regulations, and by supporting and implementing measures to reduce emissions from motor vehicles.

The EKAPCD has adopted guidance for assessing GHG emissions under CEQA, titled *Addendum to CEQA Guidelines Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency*.[116] EKAPCD also has general CEQA guidelines, but they were last updated in 1999 and do not provide guidance for GHG emissions. The GHG guidelines are for stationary projects and require that project specific GHG emissions be quantified if the proposed project is not exempt from CEQA. The guidelines provide a significance threshold of 25,000 $MTCO_2e$/year and provides for less than significant impacts if projects meet one of three conditions (discussed below in Section 3.1). The guidance and policy rely on the use of performance-based standards, otherwise known as Best Performance Standards (BPS) to assess significance of project specific greenhouse gas emissions on global climate change during the environmental review process, as required by CEQA. Use of BPS is a method of streamlining the CEQA process of determining significance and is not a required emission reduction measure.

[115] Cynthia Bryant, Letter from Director of the Office of Planning and Research to Mike Chrisman, Secretary for Natural Resources, dated April 13, 2009.

[116] Eastern Kern Air Pollution Control District (EKAPCD), *Addendum to CEQA Guidelines Addressing GHG Emission Impacts for Stationary Source Projects When Serving As Lead CEQA Agency*, March 8, 2012. http://www.kernair.org/Documents/CEQA/EKAPCD%20CEQA%20GHG%20Policy%20Adopted%203-8-12.pdf. Accessed October 2022.

2.3.2 Kern Council of Governments

As discussed above, in 2018 KCOG adopted the 2018 RTP/SCS,[117] which is an update to the previous 2014 RTP/SCS on December 16, 2022.[118] The 2022 RTP serves as a blueprint that establishes a set of regional transportation goals, policies, and actions intended to guide development of the planned multimodal transportation systems in Kern County. The 2022 SCS includes land use planning strategies and policies to reduce air emissions from passenger and light duty truck travel by better coordinating transportation expenditures with forecasted development patterns in order to meet the GHG emissions reduction target for the region by achieving a 9 percent reduction in per capita transportation GHG emissions by 2020 and a 15 percent reduction in per capita transportation emissions by 2035 compared to the 2005 level. [119] Compliance with and implementation of the 2022 RTP/SCS policies and strategies would have co-benefits of reducing per capita criteria air pollutant emissions (e.g., nitrogen dioxide, carbon monoxide, etc.) associated with reduced per capita vehicle miles traveled (VMT).

The 2022 RTP/SCS states that Kern County region was home to approximately 927,500 people in 2020 and included approximately 272,900 homes and 341,000 jobs.[120] By 2050, the integrated growth forecast projects that these figures will increase by 299,700 people, with approximately 89,200 more homes and 61,200 more jobs.[121] KCOG's 2022 RTP/SCS provides specific strategies for implementation. These strategies include supporting projects that encourage diverse job opportunities for a variety of skills and education, recreation and cultures and a full-range of shopping, entertainment and services all within a relatively short distance; encouraging employment development around current and planned transit stations and neighborhood commercial centers; encouraging the implementation of a "Complete Streets" policy that meets the needs of all users of the streets, roads and highways including bicyclists, children, persons with disabilities, motorists, electric vehicles, movers of commercial goods, pedestrians, users of public transportation, and seniors; and supporting alternative fueled vehicles.[122]

In addition, the 2022 RTP/SCS includes strategies to promote active transportation; support local planning and projects that serve short trips; promote transportation investments, investments in active transportation, more walkable and bikeable communities that will result in improved air quality and public health and reduced GHG emissions; and support building physical infrastructure such as local and regional bikeways, sidewalk and safe routes to schools pedestrian improvements, regional greenways and first-last mile connections to transit, including to light rail and bus stations. The 2022 RTP/SCS aligns active transportation investments with land use and

[117] Kern Council of Governments, 2018 Regional Transportation Plan and Sustainable Communities Strategy, August 16, 2018. https://www.kerncog.org/wp-content/uploads/2018/10/2018_RTP.pdf. Accessed October 2022..

[118] Kern Council of Governments, 2022 Regional Transportation Plan and Sustainable Communities Strategy, July 21, 2022. https://www.kerncog.org/category/docs/rtp/. Accessed October 2022.

[119] Kern Council of Governments, 2022 Regional Transportation Plan and Sustainable Communities Strategy, July 21, 2022. https://www.kerncog.org/category/docs/rtp/. Accessed October 2022.

[120] Kern Council of Governments, 2022 Regional Transportation Plan and Sustainable Communities Strategy, July 21, 2022. https://www.kerncog.org/category/docs/rtp/. Accessed October 2022.

[121] Kern Council of Governments, 2022 Regional Transportation Plan and Sustainable Communities Strategy, July 21, 2022. https://www.kerncog.org/category/docs/rtp/. Accessed October 2022.

[122] Kern Council of Governments, 2022 Regional Transportation Plan and Sustainable Communities Strategy, July 21, 2022. https://www.kerncog.org/category/docs/rtp/. Accessed October 2022.

transportation strategies, increases competitiveness of local agencies for federal and state funding, and expands the potential for all people to use active transportation. CARB is in the process of reviewing the KCOG GHG quantification determination in the 2022 RTP/SCS for future GHG emission reduction targets.

Although there are GHG emission reduction targets for passenger vehicles set by CARB for 2045, the 2022 RTP/SCS GHG emission reduction trajectory shows that more aggressive GHG emission reductions are needed for 2045. By meeting and exceeding the SB 375 targets for 2035, as well as achieving an additional 0.4 percent reduction in GHG from transportation-related sources in the ten years between 2035 and 2045, the 2022 RTP/SCS is expected to fulfill and exceed its portion of SB 375 compliance with respect to meeting the state's future GHG emission reduction goals.[123]

2.4 Local

2.4.1 Kern County General Plan

The Kern County General Plan[124] was originally adopted on June 15, 2004 and was last amended on September 22, 2009. It contains the following policies that relate to GHG emissions (i.e., through the reduction of fossil fuel use) and energy. The policies and implementation measures in the Kern County General Plan for GHG emissions that are applicable to the proposed project are provided below. The Kern County General Plan contains additional policies, goals, and implementation measures that are more general in nature and are not specific to development such as the proposed project. Therefore, they are not listed below, but all policies, goals, and implementation measures in the Kern County General Plan are incorporated by reference.

Chapter 1: Land Use, Open Space, and Conservation

Policy 18: The air quality implications of new discretionary land use proposals shall be considered in approval of major developments. Special emphasis will be placed on minimizing air quality degradation in the desert to enable effective military operations and in the valley region to meet attainment goals.

Policy 19: In considering discretionary projects for which an Environmental Impact Report must be prepared pursuant to the California Environmental Quality Act, the appropriate decision-making body, as part of its deliberations, will ensure that:

(a) All feasible mitigation to reduce significant adverse air quality impacts have been adopted; and

(b) The benefits of the project outweigh any unavoidable significant adverse effects on air quality found to exist after inclusion of all feasible mitigation. This finding shall be made in a statement of overriding considerations and shall be supported by factual evidence to

[123] Kern Council of Governments, 2022 Regional Transportation Plan and Sustainable Communities Strategy, July 21, 2022. https://www.kerncog.org/category/docs/rtp/. Accessed October 2022.

[124] Kern County Planning Department, Kern County General Plan, September 22, 2009. https://psbweb.co.kern.ca.us/planning/pdfs/kcgp/KCGP_Complete.pdf. Accessed October 2022.

the extent that such a statement is required pursuant to the California Environmental Quality Act.

Policy 20: The County shall include fugitive dust control measures as a requirement for discretionary projects and as required by the adopted rules and regulations of the Kern County Air Pollution Control District on ministerial permits.

Implementation Measure F: All discretionary permits shall be referred to the appropriate air district for review and comment.

Implementation Measure G: Discretionary development projects involving the use of tractor-trailer rigs shall incorporate diesel exhaust reduction strategies including, but not limited to: minimizing idling tine and electrical overnight plug-ins.

Implementation Measure H: Discretionary projects may use one or more of the following to reduce air quality effects:

a) Pave dirt roads within the development.

b) Pave outside storage areas.

c) Provide additional low volatile organic compounds producing trees on landscape plans.

d) Use of alternative fuel fleet vehicles or hybrid vehicles.

e) Use of emission control devices on diesel equipment.

f) Develop residential neighborhoods without fireplaces or with the use of Environmental Protection Agency certified, low emission natural gas fireplaces.

g) Provide bicycle lockers and shower facilities on site.

h) Increasing the amount of landscaping beyond what is required in the Zoning Ordinance (Chapter 19.86).

i) The use and development of park and ride facilities in outlaying areas.

j) Other strategies that may be recommended by the local Air Pollution Control Districts.

Implementation Measure H: The County should include PM10 control measures as conditions of approval for subdivision maps, site plans, and grading permits.

Chapter 5: Energy Element – Solar Energy Development

Policy 1: The County shall encourage domestic and commercial solar energy uses to conserve fossil fuel and improve air quality.

Policy 2: The County should attempt to identify and remove disincentives to domestic and commercial solar energy development.

Policy 3: The County should permit solar energy development in the desert and valley planning regions that does not pose significant environmental or public health and safety hazards.

Policy 4: The County should encourage solar development in the desert and valley regions previously disturbed, and discourage development of energy projects on undisturbed land supporting State or federally protected plant and wildlife species.

Implementation Measure A: The County shall continue to maintain, and update as necessary, provisions in the Kern County Zoning Ordinance to provide adequate development standards for commercial solar energy development.

Implementation Measure B: The County should work with affected State and federal agencies and interest groups to establish consistent policies for solar energy development.

SECTION 3
Thresholds of Significance

3.1 Greenhouse Gas Emissions Thresholds

The significance thresholds below are derived from the Environmental Checklist questions in Appendix G of the State *CEQA Guidelines*. Accordingly, a significant impact associated with GHGs would occur if the proposed project were to:

a) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or

b) Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.

The EKAPCD adopted quantitative thresholds for determining significance of GHG emissions for projects where EKAPCD is the CEQA lead agency. A project is considered to have a significant project and cumulatively considerable impact if it exceeds the following significance threshold:

- Generate 25,000 $MTCO_2e$/year.

The above significant impact would be reduced to a less than significant project and cumulatively considerable impact if it meets one of the following options:

(1) Project demonstrates that it is in compliance with state GHG reduction plan such as AB32 or federal GHG reduction plan if it is more stringent than the state plan;

(2) Project GHG emissions will be mitigated to less than significant if GHGs can be reduced by at least 20 percent below Business-As-Usual (BAU) through implementation of one or more of the following strategies:

   a. Compliance with a BPS as set forth in Section IV of EKAPCD CEQA GHG Policy;

   b. Compliance with GHG Offset as detailed in Section IV of EKAPCD CEQA GHG Policy;

   c. Compliance with Alternative GHG Reduction Strategy as discussed in Section IV of EKAPCD CEQA GHG Policy.

3.2 Newhall Ranch Ruling

The California Supreme Court recently considered the CEQA issue of determining the significance of GHG emissions in its decision, Center for Biological Diversity v. California Department of Fish and Wildlife and Newhall Land and Farming (CBD vs. CDFW). The Court questioned a common CEQA approach to GHG analyses for development projects that compares project emissions to the reductions from BAU that will be needed statewide to reduce emissions

to 1990 levels by 2020, as required by AB 32. The court upheld the BAU method as valid in theory, but concluded that the BAU method was improperly applied in the case of the Newhall project because the target for the project was incorrectly deemed consistent with the statewide emission target of a percent below BAU for the year 2020 as specified in the AB 32 Scoping Plan. In other words, the court said that the percent below BAU target specified in the AB 32 Scoping Plan is intended as a measure of the GHG reduction effort required by the State as a whole, and it cannot necessarily be applied to the impacts of a specific project in a specific location. The Court provided some guidance to evaluating the cumulative significance of a proposed land use project's GHG emissions, but noted that none of the approaches could be guaranteed to satisfy CEQA for a particular project. The Court's suggested "pathways to compliance" include:

1. Use a geographically specific GHG emission reduction plan (e.g., climate action plan) that outlines how the jurisdiction will reduce emissions consistent with State reduction targets, to provide the basis for streamlining project-level CEQA analysis, as described in CEQA § 15183.5.
2. Utilize the Scoping Plan's business-as-usual reduction goal, but provide substantial evidence to bridge the gap between the statewide goal and the project's emissions reductions;
3. Assess consistency with AB 32's goal in whole or part by looking to compliance with regulatory programs designed to reduce GHG emissions from particular activities; as an example, the Court points out that projects consistent with an SB 375 Sustainable Communities Strategy (SCS) may need to re-evaluate GHG emissions from cars and light trucks.
4. Rely on existing numerical thresholds of significance for GHG emissions, such as those developed by an air district.

As described earlier, Kern County does not currently have an adopted GHG emission reduction plan. Thus, the proposed project could not meet the requirements of a CEQA-qualified CAP as described in CEQA § 15183.5 (compliance pathway #1, referenced above).

Regarding compliance pathway #2, the Court acknowledged that "a business-as-usual comparison based on the Scoping Plan's methodology may be possible," and that "a lead agency might be able to determine what level of reduction from business as usual a new land use development at the proposed location must contribute in order to comply with statewide goals."

Compliance pathway #3 requires analysis of how regulatory programs or performance-based standards apply to a project's emissions. The proposed project would not have a significant effect on the environment if the proposed project is found to not conflict with applicable regulatory plans and policies to reduce GHG emissions, including the emissions reduction measures discussed within CARB's Climate Change Scoping Plan, KCOG's 2022 RTP/SCS, and Kern County polices established for the purpose of increasing energy efficiency and reducing GHG emissions for new developments and the County's Green Building Code.

For compliance pathway #4, the EKAPCD has developed the significance thresholds for GHG emissions, which include a "bright-line" project threshold of 25,000 $MTCO_2e$/year, where projects

exceeding the value would be less than significant if it meets additional conditions as discussed previously in Section 3.1.

The Court did not list the above pathways in order of importance or intentional sequence, nor require that they be relied upon in an analysis. However, this report considers the potential GHG emissions associated with the proposed project within the context of the Court's suggested pathways to compliance.

3.3 Energy Thresholds

According to the State CEQA Guidelines Appendix G, the proposed project could have a potentially significant impact with respect to energy if it would:

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

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SECTION 4
Methodology

The analysis of the proposed project's construction and operational GHG emissions has been conducted as follows. Additional details are provided in Appendix A of this report.

4.1 GHG Emissions Estimates

This GHG Technical Report provides an estimate of the GHG emissions from project construction and operation. The following project-related emission sources have been evaluated:

- Scope 1: Direct, on-site and off-site combustion of fossil fuels (e.g., natural gas, propane, gasoline, diesel, and transportation fuels).
- Scope 2: Indirect, off-site emissions associated with purchased electricity or purchased steam.
- Scope 3: Indirect emissions associated with other emissions sources, such as third-party vehicles and embodied energy.[125]

For purposes of this analysis, it was considered reasonable, and consistent with criteria pollutant calculations, to consider GHG emissions resulting from direct project-related activities, including, e.g., use of vehicles, electricity, and natural gas, to be new emissions. These emissions include project construction activities such as grading, hauling, and construction worker trips, as well as operational emissions. This analysis also considers indirect GHG emissions from water conveyance, wastewater generation, and solid waste handling. Since potential impacts resulting from GHG emissions are long-term rather than acute, GHG emissions were calculated on an annual basis. As previously discussed, all emission will be considered net new.

GHG emissions were estimated using the California Emissions Estimator Model (CalEEMod) (Version 2020.4.0), which is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions from a variety of land use projects. CalEEMod was developed in collaboration with the air districts of California. Regional data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.) have been provided by the various California air districts to account for local requirements and conditions. The model is considered to be an accurate and comprehensive tool for quantifying air quality and GHG impacts from land use projects throughout California.[126]

As discussed previously, the County has adopted and implemented a range of GHG reduction activities and strategies that would reduce GHG emissions. In addition, KCOG is in the process of adopting the 2022 RTP/SCS applicable to the region, which outlines KCOG's plan for

[125] Embodied energy includes energy required for water pumping and treatment for end-uses.
[126] See: http://www.caleemod.com.

integrating the transportation network and related strategies with an overall land use pattern that responds to projected growth, housing needs, changing demographics, and transportation demands. The SCS focuses on: a forecasted development pattern to accommodate the regions' future transportation, employment, and housing needs, while promoting conservation of natural resources and open space areas; a transportation network comprising well-maintained public transit, local streets and roads, managed lanes and highways, and bikeways and walkways; strategies to manage demands on the region's transportation roadway system (transportation demand management [TDM]) in ways to reduce or eliminate traffic congestion during peak demand periods; and strategies to manage operations of the region's transportation system (transportation system management [TSM]) to maximize the efficiency of the network and reduce congestion. The SCS demonstrates that it will meet or exceed the reduction in per capita GHG emissions relative to 2005 of at least 9 percent by 2020 and 15 percent by 2035 as set by CARB. The project-level analysis describes the consistency of the proposed project's GHG emission sources with local and regional GHG emissions reduction strategies.

4.1.1 Construction

Micro Mill

Construction emissions are forecasted by assuming a conservative estimate of construction activities from each phase of the proposed project. Construction emissions are estimated using the CalEEMod (Version 2020.4.0) software, an emissions inventory software program recommended by the KCAPCD. CalEEMod is based on outputs from OFFROAD (OFFROAD2021) and EMFAC (EMFAC2021), which are emissions estimation models developed by CARB and used to calculate emissions from construction activities, including off- and on-road vehicles. CalEEMod outputs construction-related GHG emissions of CO_2, CH_4, N_2O, and CO_2e. It has been assumed that construction equipment would meet USEPA Tier 4 Final and that the proposed project would implement dust control measures pursuant to KCAPCD Rule 402.

The output values used in this analysis were adjusted to be project-specific based on equipment types and the resource loaded construction schedule provided by the Applicant. Construction phasing would include site preparation, grading/excavation, drainage/utilities/trenching, electrical installation, foundations/concrete pour, building erection, mechanical equipment installation, process piping installation, paving, and landscaping. The schedule provided the construction phases with the number of equipment pieces allocated in various subphases. Therefore, not all equipment would be operated during the entire phase but only during the specified subphase. The resource loaded schedule is provided in Appendix A.

Solar Farm

Construction emissions for the solar farm were estimated from a similar solar farm in the same air district.[127] The emissions from the Aratina Solar project, which is larger in acres than that for the proposed project, were scaled based on its size and the size of the proposed solar farm of 64 acres.

[127] Kern County, Draft Environmental Impact Report, Aratina Solar Project, May 2021.

Water Line

The construction emissions for the water line connection to the proposed site will be analyzed. The location of the water line connection within the project site will be between the employee and visitor car parking area and the solar fields on the western side of the property, continuing linearly due west under the railroad easement and to the edge of the Sierra Highway right-of-way, connecting at approximately 34°56'09.7"N, 118°08'58.0"W, approximately 1,500 ft in length.

Traffic Improvements

The Traffic Impact Study completed for the Project included traffic improvements including installation of traffic signals, a dedicated access lane from Backus Road to the northbound State Route (SR) 14, a concrete overlay along Sopp Road, and the addition of one lane in each direction along Sierra Highway from Backus Road to Sopp Road. Emissions from the construction activities associated with these traffic improvements will be analyzed.

The input values used in this analysis were adjusted to be project-specific based on equipment types and the construction schedule. Haul truck trips, worker trips, and vendor truck trip estimates were based on information obtained from the Applicant and the corresponding onroad emissions were calculated using the EMFAC model and Excel spreadsheets. The CalEEMod model was used with project-specific inputs to determine offroad emissions occurring from construction-related activities. CalEEMod relies on emission factors from CARB's OFFROAD2011 model. The Association of Environmental Professionals (AEP) recommends that total construction GHG emissions resulting from a project be amortized over the project's estimated lifetime and added to GHG emissions.[128] In accordance with the AEP guidance, GHG emissions from project construction have been amortized over the 30-year lifetime of the proposed project.

Project construction is assumed to start as early as fourth quarter of 2023 and require up to 24 months with full build-out occurring in the fourth quarter of 2025. The construction of the solar farm is not yet known but expected to occur in the future, after full buildout of the micro mill. The solar farm was conservatively assumed to occur over approximately 3 months at the conclusion of the micro mill construction schedule.

4.1.2 Operations

Operational impacts were assessed for the proposed project buildout year (i.e., as early as 2025 assuming construction begins at the earliest possible time of 2023).

Micro Mill Facility

The exact equipment for the proposed project is not yet determined. Therefore, operational impacts from the micro mill portion of the proposed project, including raw (scrap) material handling, the electric arc furnace (EAF), the ladle metallurgy station (LMS), furnace, casting, rolling, slag, cooling towers, emergency engines, and fuel tanks were calculated using the CO_2e

[128] Association of Environmental Professionals (AEP), *Final White Paper Beyond 2020 and Newhall: A Field Guide t New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California*, October 29, 2016. https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf. Accessed October 2022.

intensity factor for steel mills.[129] The intensity factor was based on the anticipated production rate of 456,000 tons of steel produced per year for the proposed project. It should be noted, the Nucor facility is not an all-electric micro mill but rather does utilize natural gas. The emissions presented herein are considered conservative in nature as the all-electric micro mill will result in lower GHG emissions. Details of the processes and equipment associated with the proposed project are described below.

Raw Material Handling

Recycled shredded and un-shredded scrap metal (i.e. crushed automobiles, old appliances, machinery, sheet metal, rectangular bundles, etc.) for the proposed project would be purchased from outside suppliers and transported into the facility by truck. The scrap metal would be stored in the 34,500-square-foot scrap bay or at the overflow scrap storage piles. Scrap would be moved using a front-end loader and loaded into a conveyor system using magnet cranes to the proposed Electric Arc Furnace (EAF). Raw materials would be delivered to the project site by truck and moved into storage silos. These raw materials would be pneumatically transferred from the silos to the EAF and LMS as needed.

Alloy aggregates would be used in the EAF and LMS for refining steel metallurgy. Alloys would be transported by truck, unloaded into storage bins and eventually transferred by front-end loaders or forklift to the EAF/LMS bay for use in the EAF or LMS as needed. Ferro Silicon 75 (an alloy produced by combining 75 percent silicon and 25 percent iron), Ferro Silicon Manganese, Silicon Carbide, Calcium Carbide, Fluorspar, Metallurgical carbon alloys, Ferro Vanadium, Ferro Chrome, and Calcium Silicon alloys may be used as part of the steel making process.

Melt Shop

The melt shop process includes use of the EAF, LMS, casting operations, ladle and tundish preheat burners, and refractory repair. Scrap metal is preheated by the EAF exhaust heat and then fed into the EAF. Chemical and electrical energy would be used to melt the entire batch of scrap metal. Electrical energy is supplied to the furnace interior, while chemical energy is supplied via oxy-fuel burners that burn natural gas mixed with oxygen and use convection and flame radiation to transfer heat to the scrap metal. The melted steel is then transferred to the LMS via a ladle. The following subsections describe each process that occurs during the melt shop process:

- ***EAF:*** During the first use of the EAF after downtime, loading of scrap metal would be accomplished using charge buckets, which are transported into position over the EAF using overhead electric cranes. Once in position, the charge bucket would open, allowing scrap to fill the EAF. After the first batch of steel is made, scrap for subsequent batches would be fed to the EAF using a continuous conveyor (i.e., the endless charging system (ECS)).

  During the melting, raw materials such as fluxing agents, metallurgic coal or coke, and oxygen would be added to the molten steel in order to achieve the desired product chemistry. Once the desired steel properties are reached in the EAF, the molten steel is poured (i.e., "tapped") into the ladle. The molten steel is then transferred to the LMS via a ladle car.

[129] USSEPA. 2020. GHGRP. Accessed at https://www.epa.gov/ghgreporting, August 2020.

The slag formed in the EAF would be emptied by tipping the EAF to the side and stored in a stockpile within the EAF/LMS bay. The slag would be subsequently removed from the pit using a front-end loader, quenched using process water, and transported to an outdoor storage pile before being processed on-site.

- ***LMS:*** The ladles filled with molten steel would be transferred from the EAF to the LMS via the ladle car. The molten steel would be further refined with the injection and mixing of raw materials such as fluxing agents, carbon, and alloys into the molten steel. Once the molten steel reaches the desired temperature and composition, the ladle would transport the molten steel to the continuous casting machine.
- ***Casting Operations:*** The ladle is transported to a continuous casting machine within the caster bay. During casting, steel flows out of the bottom of the ladle via a slide gate into a tundish. From the tundish, the steel flows into a single mold. In the mold, the steel is water-cooled and formed into bars (billets).
- ***Ladle and Tundish Preheat Burners:*** Eight low NO_x burners would be used to preheat the ladles and tundishes.

Rolling Mill Process

The rolling mill process is a metal forming process in which metal stock is passed through one or more pairs of rolls to reduce the thickness and to make the thickness of the metal uniform. The rolling mill process includes an induction furnace located between the caster and the rolling mill for temperature elevation and stabilization, then a series of rolling mill stands that reduce the cross-sectional area and hot-form final rolled steel reinforcing bar. The products are water quenched for tempering and directed to the cooling beds to cool in the ambient air. The rolled steel is cooled then sheared to length, bundled and stored or fed directly into spooler machines which roll the reinforcing bar into a spool. Automated tying systems would then prepare products for movement by an overhead crane to storage areas, directly to trucks or transferred to the fabrication shop.

Cooling Towers

Two non-contact cooling towers and one contact cooling tower would be used to remove heat from the cooling water used in the proposed project. Cooling towers reduce the temperature of the system by relying on the latent heat of water evaporation to exchange heat between the cooling water and the air passing through the cooling tower. Because cooling towers provide direct contact between the cooling water and the air passing through the tower, some of the liquid water may be entrained in the air stream and be carried out of the tower into the atmosphere as “drift” droplets.

Ancillary Buildings

Operational impacts associated with the ancillary buildings part of the project were also calculated. The proposed project includes seven ancillary structures for storeroom and vehicle maintenance, office building, locker room, slag processing office building, containerized power control room, guard shack/scale house, and a trucker restroom facility.

CalEEMod was used to estimate operational GHG emissions from electricity, fossil fuels, solid waste, water and wastewater for the ancillary buildings, and landscaping equipment for the entire project site. CalEEMod was used to estimate mobile source emissions where emissions factors from CARB's updated version of the on-road vehicle emissions factor (EMFAC) model were input into CalEEMod to calculate mobile GHG emissions. The most recent version is EMFAC2021, which "represents CARB's current understanding of motor vehicle travel activities and their associated emission levels."[130] CalEEMod generated the vehicle miles traveled (VMT) from project uses based on the trip rates in the Transportation Impact Study.[131] In addition, the U.S. Environmental Protection Agency's AP-42 Compilation of Air Pollutant Emission Factors to evaluate operational GHG emissions from a number of emission sources including the electric furnace, ladle and furnace preheater, roll mill, cooling towers, fire pumps, emergency generators, fuel tanks, casting operations, and slag material.

With regard to energy demand, the consumption of fossil fuels to generate electricity and to provide heating and hot water generates GHG emissions. Energy demand rates were estimated based on specific square footage of the new industrial uses, as well as predicted water supply needs for these uses. The proposed project electricity demands are supplied by SCE and onsite solar provided as part of the proposed project. CalEEMod provides default intensity factors for CO_2, CH_4, and N_2O for SCE and calculates an overall CO_2e intensity factor. The default CO_2 intensity factor is based on year 2012 and was adjusted to reflect an intensity factor that represents a 2022 scenario. By 2020, CPUC estimates that 41.4 percent of the energy SCE provide its customers is contracted to be generated by sources of renewable energy.[132]Also, as described above, SB 100 requires local publicly owned electric utilities to procure eligible renewable electricity for 44 percent of retail sales by December 31, 2024. Therefore, since the proposed project's first operational year is anticipated to be 2025, the default CO_2 intensity factor in CalEEMod for SCE was linearly adjusted from 2020 to account for 42.4 percent renewable energy for 2022 based on the required renewables from year 2024 under SB 100. For 2012, SCE had 20.6 percent renewables and this was used to back calculate a CO_2 intensity factor where SCE had zero percent renewable. This value was then adjusted to reflect a CO_2 intensity factor with 42.4 percent renewables.

Emissions of GHGs from solid waste disposal were also calculated using CalEEMod software. The emissions are based on the waste disposal rate for the land uses, the waste diversion rate, and the GHG emission factors for solid waste decomposition. The GHG emission factors, particularly for CH_4, depend on characteristics of the landfill, such as the presence of a landfill gas capture system and subsequent flaring or energy recovery. In addition, it was assumed 75 percent of solid waste will be diverted from landfills as AB 341 directs CalRecycle to develop and adopt

130 California Air Resources Board, Mobile Source Emissions Inventory, 2022. https://ww2.arb.ca.gov/our-work/programs/mobile-source-emissions-inventory. Accessed October 2022.

131 LAV//Pinnacle Engineering, Traffic Impact Study for Pacific Steel Group Reinforcing Bar Manufacturing Plant, October 10, 2022.

132 California Public Utilities Commission. California Renewables Portfolio Standard (RPS). https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/electric-power-procurement/rps. Accessed October 2022.

regulations for mandatory commercial recycling and sets a Statewide goal for 75 percent disposal reduction by the year 2020.[133]

Emissions of GHGs from water and wastewater result from the required energy to supply and distribute the water and treat the wastewater. Wastewater also results in emissions of GHGs from wastewater treatment systems. Emissions were calculated using CalEEMod and were based on the water usage rate for the land uses, the electrical intensity factors for water supply, treatment, and distribution and for wastewater treatment, the GHG emission factors for the electricity utility provider, and the emission factors for the wastewater treatment process.

Other sources of GHG emissions from operation of the proposed project include equipment used to maintain landscaping, such as lawnmowers and trimmers. The CalEEMod software uses landscaping equipment GHG emission factors from the CARB OFFROAD model and the CARB Technical Memo: Change in Population and Activity Factors for Lawn and Garden Equipment (6/13/2003).

Emissions calculations for the proposed project include credits or reductions for GHG reducing measures that are required by regulation, such as reductions in energy and water demand from the current Title 24 standards and the California Green Building Standards (CALGreen) Code. Physical and operational project characteristics for which sufficient data is available to quantify the reductions from building energy and resource consumption have been included in the quantitative analysis and include but are not limited to the following features.

As previously stated operational GHG impacts are assessed based on the project-related incremental increase in GHG emissions compared to baseline conditions and incorporation of emissions reduction strategies.

4.2 Conflicts with Greenhouse Gas Reduction Plan, Policies, and Actions

The proposed project's GHG emissions are also evaluated by assessing the proposed project's potential to conflict with applicable GHG reduction strategies and actions adopted by the State and County. As discussed previously, the County has adopted strategies and polices to reduce GHG emissions through its General Plan.

4.3 Energy Estimates

4.3.1 Construction

Construction of the proposed project would be implemented in subphases as discussed above in Section 4.1, GHG Emission Estimates. Project construction is expected to commence in 2023 and last for two years with operations beginning in 2025. Construction energy consumption would result primarily from transportation fuels (e.g., diesel and gasoline) used for haul trucks, heavy-

[133] California Legislative Information, Assembly Bill No. 341, February 10, 2011. http://www.leginfo.ca.gov/pub/11-12/bill/asm/ab_0301-0350/ab_341_bill_20111006_chaptered.html. Accessed October 2022.

duty construction equipment, and construction workers traveling to and from the project site. Construction activities can vary substantially from day to day, depending on the specific type of construction activity and the number of workers and vendors traveling to the project site (see Appendix B for detailed construction assumptions). This analysis considers these factors and provides the estimated maximum construction energy consumption for the purposes of evaluating the associated impacts on energy resources.

Electricity

Construction electricity was estimated for the energy consumed off-site related to treatment and conveyance of water to the project site for dust control. In addition, electricity from water conveyance for dust control was also calculated based on the estimated exposed area and water needs to cover the area during construction activity. Default CalEEMod water electricity intensity factors were used to convert the volume of water needed to electricity demand from water conveyance.

Natural Gas

Construction activities, including the construction of new buildings and facilities, typically do not involve the consumption of natural gas. Accordingly, natural gas is not expected to be consumed during project construction. Therefore, natural gas associated with construction activities was not calculated.[134]

Transportation Fuels

Fuel consumption from on-site heavy-duty construction equipment was calculated based on the equipment mix and usage factors provided in the CalEEMod construction output files included in Appendix B, of this Technical Report. The total horsepower was then multiplied by fuel usage estimates per horsepower-hour from CARB's off-road vehicle (OFFROAD) model. Fuel consumption from construction on-road worker, vendor, and delivery/haul trucks was calculated using the trip rates and distances provided in the emissions modeling worksheets and CalEEMod construction output files. Total VMT for these on-road vehicles were then calculated for each type of construction-related trip and divided by the corresponding county-specific miles per gallon factor using CARB's EMFAC2021 model. EMFAC provides the total annual VMT and fuel consumed for each vehicle type. CalEEMod default trip lengths were used for worker commutes while vendor, management visits, concrete, and haul truck trips were taken from emissions modeling worksheets that used EMFAC2021 emission factors. Consistent with CalEEMod, construction worker trips for the proposed project were assumed to include a mix of light-duty gasoline automobiles and light-duty gasoline trucks. Construction vendor trucks were assumed to be a mix of medium-heavy-duty and heavy-duty diesel trucks and concrete and haul

[134] In general, natural gas would not be expected to be used and this energy analysis assumes heavy-duty construction equipment is diesel-fueled, as is typically the case. However, natural gas-fueled heavy-duty construction equipment could be used to replace some diesel-fueled heavy-duty construction equipment. If this does occur, diesel fuel demand would be slightly reduced and replaced by a small amount of temporary natural gas demand. This would not substantially affect the energy analysis or conclusions provided herein.

trucks were assumed to be heavy-duty diesel trucks. Refer to Appendix B, of this Technical Report, for detailed energy calculations.

The energy usage required for project construction has been estimated based on the number and type of construction equipment that would be used during project construction by assuming a conservative estimate of construction activities (i.e., maximum daily equipment usage levels) during the relevant timeframe for such construction activities. Energy for construction worker commuting trips has been estimated based on the predicted number of workers for the various phases of construction and the estimated VMT based on the conservative values in the CalEEMod and EMFAC2021 models. The assessment also includes a discussion of the proposed project's compliance with relevant energy-related regulatory requirements that would minimize the amount of energy usage during construction.

The construction equipment and haul trucks would likely be diesel-fueled, while the construction worker commute vehicles would primarily be gasoline-fueled. For the purposes of this assessment, it is conservatively assumed that all heavy-duty construction equipment and haul trucks would be diesel-fueled. The estimated fuel economy for heavy-duty construction equipment is based on fuel consumption factors from the CARB OFFROAD emissions model, which is a State-approved model for estimating emissions from off-road heavy-duty equipment. The estimated fuel economy for haul trucks and worker commute vehicles is based on fuel consumption factors from the CARB EMFAC emissions model, which is a State-approved model for estimating emissions on-road vehicles and trucks. Both OFFROAD and EMFAC are incorporated into CalEEMod. However, emissions for worker, vendor, and concrete/haul trucks were calculated outside of CalEEMod using emission factors from EMFAC2021 to provide a more detailed and accurate account of truck emissions.

4.3.2 Operation

Operation of the proposed project would require energy in the form of electricity and natural gas for building heating, cooling, lighting, water demand and water and wastewater treatment, electronics, and other energy needs, and transportation-fuels, primarily gasoline, for vehicles traveling to and from the project site.

Electricity

The proposed project would include approximately 63 acres of ground-mounted solar panels, which is intended to generate 25,550-megawatt hours (MWh) per year of electricity for on-site use to power the electric arc furnace (EAF) and the ladle metallurgy station (LMS). Additional energy sourced from SCE would be required to power the remaining portions of the facility. A substation would be installed on the project site to support the ground-mounted solar panels. The proposed project's estimated electricity demand to be sourced from SCE was analyzed relative to SCE's existing energy supplies available to serve the project site in 2022 to determine if the utilities would be able to meet the proposed project's energy demands. Annual consumption of electricity (including electricity usage associated with the supply and conveyance of water) from project operations was calculated using demand factors provided in CalEEMod, which are based on the 2019 Title 24 standards, which went into effect on January 1, 2020. Energy usage from

water demand (e.g., electricity used to supply, convey, treat, and distribute) are estimated herein based on the new buildings and facilities proposed by the project. The assessment also includes a discussion of the proposed project's compliance with relevant energy-related regulatory measures, that would minimize the amount of energy usage during operation.

Natural Gas

The proposed project would not include any natural gas infrastructure and thus would not have any building natural gas demand.

Transportation Fuels

Energy for transportation from workers and visitors traveling to and from project site is estimated based on the predicted number of trips to and from the site. Mobile emissions were estimated based on emissions factors from EMFAC along with VMT values based on the Transportation Impact Analysis (TIA) to estimate on-road mobile source emissions.[135]The VMT associated with the TIA are based on local trip distances to and from the project site. Diesel fuel consumption accounts for fuel reduction from the incorporation of electric vehicles under the Advanced Clean Truck Program prior to 2035. Refer to VMT data in Appendix B, of this Technical Report, and energy calculations in Appendix B, of this Technical Report. The proposed project consumption is compared to both supply and infrastructure availability.

4.4 Conflicts with Plans for Renewable Energy or Energy Efficiency

The proposed project is also evaluated by assessing the proposed project's potential to conflict with applicable renewable energy or energy efficiency plan adopted by the State and County. As discussed previously, the County has adopted strategies and polices for energy use and energy efficiency through its General Plan.

[135] LAV//Pinnacle Engineering, Traffic Impact Study for Pacific Steel Group Reinforcing Bar Manufacturing Plant, October 10, 2022.

SECTION 5
Environmental Impacts

5.1 GHG Impacts

Impact GHG-1: A significant impact would occur if the project would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

Impact GHG-2: A significant impact would occur if the project would conflict with any applicable plan, policy, regulation, or recommendation of an agency adopted for the purpose of reducing the emissions of GHGs.

Impact Statement GHG-1 and GHG-2): The proposed project would generate GHG emissions due to construction and operational activities. The proposed project's annual direct and indirect GHG emissions would be generated from development that is located and designed to not conflict with relevant goals and actions to reduce project emissions as much as feasibly possible, as well as not conflicting with the HSC Division 25.5 goals and CARB guidelines for assessing GHG emissions. Therefore, the proposed project's GHG emissions and associated impacts would be less than significant.

5.1.1 Construction Emissions

As explained above, the emissions of GHGs associated with construction of the proposed project were calculated for each year of construction activity assuming use of USEPA Tier 4 final equipment and implementation of EKAPCD Rule 402 dust control requirements. Results of the project's construction phase GHG emissions calculations are presented in **Table 5**, *Proposed Project Construction Greenhouse Gas Emissions*. Although construction-related GHGs are one-time emissions, any assessment of project emissions should include construction emissions. As discussed above, AEP recommends that a project's construction-related GHG emissions be amortized over the project's 30-year lifetime in order to include these emissions as part of the project's annualized lifetime total emissions, so that GHG reduction measures will address construction GHG emissions as part of the operational GHG reduction strategies. As indicated in Table 3, proposed project construction emissions during the approximate 24-month construction period would generate an estimated 38,575 $MTCO_2e$, or 1,286 $MTCO_2e$ amortized over a 30-year period. A complete listing of the equipment by phase, emission factors, and calculation parameters used in this analysis is included within the emissions calculation worksheets that are provided in Appendix A of this report.

TABLE 5
PROPOSED PROJECT CONSTRUCTION GREENHOUSE GAS EMISSIONS

Emission Source	CO_2e (Metric Tons) [a,b]
Mill Construction	
Construction Year 2023	11,003
Construction Year 2024	24,838
Construction Year 2025	2,509
Off-Site Improvements	
Traffic Improvement Project 1 – 2025	34
Traffic Improvement Project 2 – 2041	37
Traffic Improvement Project 3 – 2025	33
Traffic Improvement Project 4 – 2041	66
Water Line Project – 2025	57
Total Construction Emissions	**38,575**
Amortized Construction Emissions (30-years)	**1,286**

[a] Totals may not add up exactly due to rounding in the modeling calculations Detailed emissions calculations are provided in Appendix A.

[b] CO_2e emissions are calculated using the GWP values from the IPCC Fourth Assessment Report.

SOURCE: ESA, 2022.

5.1.2 Operational Emissions

Operation and maintenance of the proposed project would generate GHG emissions largely through the manufacturing process (i.e., electric furnace, ladle and furnace preheater, roll mill, cooling towers, fire pumps, emergency generators, fuel tanks, casting operations, and slag material), motor vehicle trips to and from the project site; on-site maintenance activities involving portable equipment and maintenance vehicles; and energy use (i.e., electricity and natural gas), water conveyance and treatment, and waste sources were calculated for the expected first operating year, 2025. **Table 6**, *Estimated Annual Operational Greenhouse Gas Emissions*, summarizes operational emissions associated with the proposed project. With implementation of the proposed project's green building measures, the proposed project would achieve GHG reductions for electricity as shown by the negative GHG emissions associated with the solar array. As shown in Table 6, the proposed project is estimated to emit 169,74 $MTCO_2e$ per year during operation. The total construction GHG emissions, amortized over 30 years, was added to the annual estimated operational emissions to estimate annual GHG emissions generated by the proposed project. As shown in Table 6, Estimated Annual Operational Greenhouse Gas Emissions, the proposed project would emit 171,260 $MTCO_2e$ per year, throughout the operational life of the proposed project (assumed 30 years).

Additionally, the proposed on-site substations may feature circuit breakers that contain SF6 gas, used as an insulator and an arc suppressor in the breakers. SF6 is inert, non-toxic, and is encapsulated in the breaker assembly. SF6 is a GHG with substantial global warming potential because of its chemical nature and long residency time within the atmosphere. However, under

normal conditions, it would be completely contained in the equipment and SF6 would be released only in the unlikely event of a failure, leak, or crack in the circuit breaker housing. New circuit breaker designs have been developed to minimize the potential for leakage, compared to that of past designs, and the amount of SF6 that could be released by the solar facility equipment would be minimal.

TABLE 6
ESTIMATED ANNUALIZED PROPOSED PROJECT GREENHOUSE GAS EMISSIONS

	Operational Emissions CO_2e (Metric Tons per Year) [a]
Opening Operational Year (2025)	
Micro Mill Energy	44,200
Ancillary Buildings	209
Mobile	16,530
Manufacturing	109,440
Water Treatment	376
Emergency Generators	72
Offroad Mobile Equipment	3,122
Fuel Tanks	533
Solar Array	(4,552)
Operational Subtotal	**169,974**
Amortized Construction	1,286
Total	**171,260**
EKAPCD Significance Threshold	**25,000**
Exceed Threshold	**Yes**

[a] Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix A.

SOURCE: ESA, 2022

As shown in Table 6, the proposed project is considered to have a significant project and cumulatively considerable impact because its GHG emissions would exceed the EKAPCD significance threshold. This significant impact can be reduced to a less than significant impact and less than cumulatively considerable impact if the proposed project demonstrates that it is (1) in compliance with a state GHG reduction plan such as AB32 or Cap-and-Trade Program or (2) the proposed project's GHG emissions can be reduced by at least 20 percent below Business-As-Usual (BAU) through implementation of one or more of the following strategies: (a) compliance with a BPS, (b) compliance with GHG Offsets, or (c) compliance with an alternative GHG reduction strategy. The discussion in Section 5.1.3, below, demonstrates the proposed project's compliance with option (1), compliance with a state GHG reduction plan.

Project operational-related GHG emissions would decline in future years as emissions reductions from the State's Cap-and-Trade program are fully realized. Reductions from the proposed project's second and third highest GHG-emitting sources, mobile and electricity emissions, would

occur over the next decade, and beyond, as regulations require cleaner and more efficient sources, ensuring that the proposed project's total GHG emissions would be further reduced. Emissions from electricity would decline as utility providers, including SCE, meet their RPS obligations to provide 60 percent of their electricity from renewable electricity sources by 2030 consistent with SB 100, which would achieve additional reductions in emissions from electricity demand although the actual reduction will depend on the mix of fossil fuels that SCE will replace with renewables and the relative CO_2 intensities of those fossil fuels. Project emissions from mobile sources would also decline in future years as older vehicles are replaced with newer vehicles resulting in a greater percentage of the vehicle fleet meeting more stringent combustion emissions standards, such as the model year 2017-2025 Pavley Phase II standards, federal GHG emissions standards for model years 2023 -2026, passenger cars and light trucks, the CAFE standards for model year 2024-2026 for passenger cars and light trucks, and Advanced Clean Cars II program.

5.1.3 Conflict with State Plans, Policies, or Regulations

Manufacturing-related GHG emissions would be the largest source of emissions from the proposed project, as expected from a micro-mill plant which produces rebar. The proposed project is subject to a Prevention of Significant Deterioration (PSD) permit, due to the emissions of a regulated New Source Review (NSR) pollutant, and thus is subject to Tailoring Rule Step 1 which states that GHGs that are emitted in at least specified threshold amounts from a new source that is subject to PSD anyway, due to emissions of another regulated NSR pollutant, are subject to regulation and therefore a regulated NSR pollutant from that source.[136] Since GHGs are considered a regulated NSR pollutant for the PSD permit, they are subject to a 75,000 CO_2e tons per year (typ) thresholds. [137] As the proposed project is subject to Tailoring Rule Step 1 and its CO_2e emissions are greater than 75,000 tpy, it is subject to a determination of BACT for GHGs. The US EPA recommends five-step "top-down" BACT process: (1) identify all available control technologies; (2) eliminate technically infeasible options; (3) rank remaining control technologies; (4) evaluate most effective control technologies; and (5) select the BACT. [138] BACT requires emissions limitation based on the maximum degree of emissions reduction (considering energy, environmental, and economic impacts) achievable through application of production processes and available methods, systems, and techniques. Since the proposed project has not been completely designed, we do not know the specific BACT that will be implemented. However, BACT must be applied for the proposed project to be granted the PSD permit. The US EPA states that BACT should consider energy efficiency, which includes clean fuels, and carbon capture and storage. As part of the proposed project, a solar array is proposed to provide part of the micro-mill's energy requirement.

[136] United States Environmental Protection Agency, 2011. PSD and Title V Permitting Guidance for Greenhouse Gases, March. https://www.epa.gov/sites/default/files/2015-12/documents/ghgpermittingguidance.pdf. Accessed January 2023.

[137] United States Environmental Protection Agency, 2011. PSD and Title V Permitting Guidance for Greenhouse Gases, March. https://www.epa.gov/sites/default/files/2015-12/documents/ghgpermittingguidance.pdf. Accessed January 2023.

[138] United States Environmental Protection Agency, 2011. PSD and Title V Permitting Guidance for Greenhouse Gases, March. https://www.epa.gov/sites/default/files/2015-12/documents/ghgpermittingguidance.pdf. Accessed January 2023.

Energy is the proposed project's second largest GHG emissions source. The California Energy Commission adopted CALGreen (Part 11 of Title 24, Building Energy Efficiency Standards) to "improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air quality."[139] CALGreen was most recently updated in 2022, which took effect on January 1, 2023.[140] The proposed project would comply with CALGreen requirements, which could include but are not limited to installation of ENERGY STAR® compliant appliances to the greatest extent feasible, installation of solar, electric or lower-nitrogen oxides gas-fired water heaters, and installation of water-efficient irrigation systems. Additionally, CALGreen requires designated parking spaces for carpool or alternative fueled vehicles, long- and short-term bike parking, and installation of electrical conduit for electric vehicle charging parking spaces. The 2022 CAlGreen Code also focuses on battery storage system controls, demand management, heat pump space and water heating, and building electrification. Compliance with the 2022 CalGreen Code is mandatory. As such, implementation of the proposed project would not conflict with this code. The proposed project would be consistent with the County's goals to reduce emissions through reduced energy consumption by meeting or exceeding Title 24 standards, Energy Star appliances, and LED lighting.

Transportation-related GHG emissions are the third largest source of emissions from the proposed project. SB 375 requires KCOG to direct the development of the RTP/SCS for the region. At the regional level, the 2022 RTP/SCS is an applicable plan adopted for the purpose of reducing GHGs. The purpose of the 2022 RTP/SCS is to achieve the regional per capita GHG reduction targets for the passenger vehicle and light-duty truck sector established by CARB pursuant to SB 375. KCOG's Program EIR for the 2022 RTP/SCS states that "[p]ursuant to SB 375, KCOG must prepare an SCS to meet GHG reduction targets identified by CARB." The 2022 RTP/SCS is a comprehensive area-wide transportation program to address the mobility challenges created by the region's growth.[141] The 2022 RTP has seven core goals:

- **Mobility** – Improve the mobility of people and freight.
- **Accessibility** – Improve accessibility to, and the economic wellbeing of, major employment and other regional activity centers.
- **Reliability/Safety** – Improve the reliability and safety of the transportation system.
- **Efficiency** – Maximize the efficiency and cost effectiveness of the existing and future transportation system.
- **Livability/Quality of Life** – Promote livable communities and satisfaction of consumers with the transportation system.

139 California Building Standards Commission, *2010 California Green Building Standards Code*, 2010.

140 California Building Standards Commission, *2022 California Green Building Standard Code*, July 2022. https://www.dgs.ca.gov/BSC/CALGreen, Accessed October 2022.

141 KCOG, 2022 RTP/SCS, May 2022. https://www.kerncog.org/wp-content/uploads/2022/04/CHAPTER-1-INTRODUCTION-2022-RTP-1.pdf. Accessed October 2022.

- **Sustainability** – Provide for the enhancement and expansion of the system while minimizing effects on the environment.
- **Equity** – Ensure an equitable distribution of the benefits among various demographic and user groups.

The 2022 SCS strives to reduce polluting tailpipe emissions from passenger vehicle and light duty truck travel by better coordinating transportation expenditures with forecasted development patterns to help meet CARB greenhouse gas targets for the region. The intent of the SCS is to achieve the state's GHG emission reduction targets for automobiles and light trucks. The SCS will also provide opportunities for a stronger economy, healthier environment, and improved quality of life for community members in Kern County. The SCS plans to achieve these through:

- A forecasted development pattern to accommodate the region's future transportation, employment, and housing needs, while promoting conservation of natural resources and open space areas.
- A transportation network comprising well-maintained public transit, local streets and roads, managed lanes and highways, and bikeways and walkways.
- Strategies to manage demands on the region's transportation roadway system (also known as transportation demand management, or TDM) in ways that reduce or eliminate traffic congestion during peak periods of demand.
- Strategies to manage operations of the region's transportation system (also known as transportation system management, or TSM) to maximize the efficiency of the network and reduce congestion.

In order to assess the proposed project's potential to conflict with the 2022 RTP/SCS, the proposed project's land use characteristics were analyzed for potential conflicts with the strategies and policies set forth in the 2022 RTP/SCS to meet GHG emission-reduction targets set by CARB. Generally, projects are considered to not conflict with applicable County and regional land use plans and regulations, such as KCOG's 2022 RTP/SCS, if they are compatible with the general intent of the plans and would not preclude the attainment of their primary goals. As discussed above, the proposed project is an industrial project that would incorporate solar to meet some of its electrical needs.

The 2022 RTP/SCS incorporates local land use projections and circulation networks in city and county general plans. The 2022 RTP/SCS is not directly applicable to the proposed project because the underlying purpose of the 2022 RTP/SCS is to provide direction and guidance by making the best transportation and land use choices for future development. However, the proposed project would support the 2022 RTP/SCS by offering employment opportunities in the community. The Project traffic impact study report calculated VMTs from the proposed project in accordance with SB 743, which states that VMT associated with the movement of goods does not need to be analyzed or mitigated in the determination of transportation impacts. Therefore, project VMT will only apply to "automobiles", which refers to on-road passenger vehicles, specifically cars and light-trucks.[142] Additionally, the proposed project-generated trips have not

[142] LAV//Pinnacle Engineering, *Traffic Impact Study for Pacific Steel Group Reinforcing Bar Manufacturing Plant, Kern County, California*, page 29. October 10, 2022.

been reduced by adjustments for capture trips, pass-by trips, or for carpooling.[143] Thus, GHG emissions from mobile sources are conservative, since no reductions are being taken from any VMT reduction measures. Although almost any project will increase VMT, the intent of SB 32, SB 743, AB 1279 is the reduction of GHG emissions. As discussed in the traffic impact study report[144], without this project bulk steel materials need to be imported from out of state (Washington, Utah, Oregon, and Arizona) into California. In 2025, without the proposed project, the VMT would be 17,028,846. With the project, VMT would be reduced to 10,013,775, a reduction of 7,015,071 VMT, resulting in a 41 percent reduction in average VMT by the Pacific Steel Group fleet, thus reducing GHG emissions.[145] Thus, without the proposed project additional GHG emissions would occur due to the additional travel distance to transport scrap metal out of the State for milling and manufacturing, and transport of reinforcing bars back into California markets. Therefore, the proposed project would reduce trucking distances by more than 7 million miles. Given that trucks can emit as much as eight times the GHGs per mile of automobiles, the proposed project would significantly reduce GHG emissions, meeting the intent of SB 32, SB 743, and AB 1279[146].

Thus, the proposed project would support a reduction in VMT over the state, in accordance with the goals of the 2022 RTP/SCS. Furthermore, the proposed project does not conflict with the areas of anticipated GHG reductions to meet CARBs goals set forth in the 2022 RTP/SCS, AB 32, SB 743, and AB 1279. Therefore, the proposed project would not conflict with the goals and policies of the 2022 RTP/SCS, AB 32, SB 743, and AB 1279 which are designed to reduce GHG emissions. In addition, the proposed project would not impact local transportation or land use during operation. The proposed project would not conflict with the 2022 RTP/SCS goal to adapt to a changing climate and to support an integrated regional development pattern as discussed above.

The CARB 2022 Scoping Plan For Achieving Carbon Neutrality, was approved in December 2022, and expands on prior Scoping Plans and recent legislations, such as AB 1279, by outlining a technologically feasible, cost-effective, and equity-focused path to achieve the state's climate target of reducing anthropogenic GHG emissions to 85 percent below 1990 levels and achieving carbon neutrality by 2045 or earlier.[147] To achieve carbon neutrality by 2045, the 2022 Scoping Plan contains GHG reductions, technology, and clean energy mandated by statutes, reduction of short-lived climate pollutants, and mechanical carbon dioxide capture and sequestration actions. **Table 7,** *Consistency Analysis with Applicable 2022 Scoping Plan Actions and Strategies*, contains a list of GHG emission reduction actions and strategies from the 2022 Scoping Plan and describes the proposed project's consistency with them.

[143] LAV//Pinnacle Engineering, *Traffic Impact Study for Pacific Steel Group Reinforcing Bar Manufacturing Plant, Kern County, California*, page 29. October 10, 2022.

[144] LAV//Pinnacle Engineering, *Traffic Impact Study for Pacific Steel Group Reinforcing Bar Manufacturing Plant, Kern County, California*, page 31, October 10, 2022.

[145] LAV//Pinnacle Engineering, *Traffic Impact Study for Pacific Steel Group Reinforcing Bar Manufacturing Plant, Kern County, California*, page 31, October 10, 2022.

[146] LAV//Pinnacle Engineering, *Traffic Impact Study for Pacific Steel Group Reinforcing Bar Manufacturing Plant, Kern County, California*, page 38, October 10, 2022.

[147] California Air Resources Board. 2022. 2022 Scoping Plan For Achieving Carbon Neutrality, November 16. 2022 Scoping Plan Update (ca.gov). Accessed December 19, 2022.

TABLE 7
CONSISTENCY ANALYSIS WITH APPLICABLE 2022 SCOPING PLAN ACTIONS AND STRATEGIES

2022 Scoping Plan Action	Responsible Party(ies)	Consistency Analysis
Transportation Technology Sector		
• Achieve 100 percent ZEV sales of light duty vehicles by 2035 and medium heavy-duty vehicles by 2040. • Achieve 20 percent zero-emission target for the aviation sector. • Develop a rapid and robust network of ZEV refueling infrastructure to support needed transition to ZEVs. • Ensure that the transition of ZEV technology is affordable for low income households and communities of color, and meets the needs of communities and small business. • Prioritize incentive funding for heavy-duty ZEV technology deployment in regions of the state with the highest concentrations of harmful criteria and toxic air contaminant emissions. • Promote private investment in the transition to ZEV technology, undergirded by regulatory certainty such as infrastructure credits in the Low Carbon Fuel Standard for hydrogen and electricity and hydrogen station grants from the CEC's Clean Transportation Program pursuant to Executive Order B-48-18. • Evaluate and continue to offer incentives similar to those through FARMER, Carl Moyer, the Clean Fuel Reward Program, the Community Air Protection Program, the Low Carbon Transportation, including CORE. Where feasible, prioritize and increase funding for clean transportation equity programs. • Continue and accelerate funding support for zero emission vehicles and refueling infrastructure through 2030 to ensure the rapid transformation of the transportation sector.	State agencies and local agencies	**No Conflict.** Vehicles must transition to zero emission technology to decarbonize the transportation sector. Executive Order N-79-20296 reflects the urgency of transitioning to zero emission vehicles (ZEVs) by establishing target dates for reaching 100 percent ZEV sales or fleet transitions to ZEV technology. EO N-79-20 calls for 100 percent ZEV sales of new light-duty vehicles by 2035. The Advanced Clean Cars II regulation fulfills this goal and serves as the primary mechanism to help deploy ZEVs. A number of existing incentive programs also support this transition, including the Clean Cars 4 All Program. EO N-79-20 also sets targets for transitioning the medium- and heavy-duty fleet to zero emissions: by 2035 for drayage trucks and by 2045 for buses and heavy-duty long-haul trucks where feasible. Replacing heavy-duty vehicles with ZEV technology will significantly reduce GHG emissions and diesel PM emissions in low-income communities and communities of color adjacent to ports, distribution centers, and highways. The existing Advanced Clean Trucks regulation, paired with the proposed Advanced Clean Fleets regulation, are designed to transition a significant amount of the Off-road vehicles rely heavily on ICE technology and EO N-79-20 sets an off-road equipment target of transitioning the entire fleet to ZEV technology by 2035, where feasible. There are a number of funding sources available to support this transition, including FARMER, Carl Moyer, and Community Air Protection Incentives; as well as Low Carbon Transportation Incentives, including the Clean Off-Road Equipment (CORE) program. Refueling infrastructure is a crucial component of transforming transportation technology. Electric vehicle chargers and hydrogen refueling stations must become easily accessible for all drivers to support a wholesale transition to ZEV technology. Deployment of ZEV refueling infrastructure is currently supported by a number of existing local and state public funding mechanisms. Intrastate aviation relies on ICE technology today, but battery-electric and hydrogen fuel cell aviation applications are in development, along with sustainable aviation fuel. GHG emissions generated by project-related passenger and truck vehicular travel would benefit from the above regulations and programs, and mobile source emissions generated by the proposed project would be reduced California truck fleet to ZEV technology. As with the LDV sector, a number of incentive programs support this transition,

TABLE 7
CONSISTENCY ANALYSIS WITH APPLICABLE 2022 SCOPING PLAN ACTIONS AND STRATEGIES

2022 Scoping Plan Action	Responsible Party(ies)	Consistency Analysis
		such as the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP).with implementation of standards under the Advanced Clean Cars II Program, Advanced Clean Fleet Regulation, and HVIP consistent with reduction of GHG emissions under AB 1279. Thus, the proposed project would not conflict with actions under the transportation technology sector.
Transportation Fuels Sector		
• Accelerate the reduction and replacement of fossil fuel production and consumption in California. • Incentivize private investment in new zero-carbon fuel production in California. • Incentivize the transition of existing fuel production and distribution assets to support deployment of low- and zero-carbon fuels while protecting public health and the environment. • Invest in the infrastructure to support reliable refueling for transportation such as electricity and hydrogen refueling. • Evaluate and propose, as needed, changes to strengthen the Cap-and-Trade Program. • Initiate a public process focused on options to increase the stringency and scope of the LCFS: ○ Evaluate and propose accelerated carbon intensity targets pre-2030 for LCFS. ○ Evaluate and propose further declines in LCFS post-2030 carbon intensity targets to align with this 2022 Scoping Plan. ○ Consider integrating opt-in sectors into the program. ○ Provide capacity credits for hydrogen and electricity for heavy-duty fueling. • Monitor for and ensure that raw materials used to produce low-carbon fuels or technologies do not result in unintended consequences.	State agencies and local agencies	**No Conflict.** The state must continue to support low-carbon liquid fuels during this period of transition and for much harder sectors for ZEV technology such as aviation, locomotives, and marine applications. Biomethane currently displaces fossil fuels in transportation and will largely be needed for hard-to-decarbonize sectors but will likely continue to play a targeted role in some fleets while the transportation sector transitions to ZEVs. Private investment in alternative fuels will play a key role in diversifying the transportation fuel supply away from fossil fuels. EO N-79-20 calls on state agencies to support the transition of existing fuel production facilities away from fossil fuels and directs that this transition also protect and support workers, public health, safety, and the environment. In line with this direction, existing refineries could be repurposed to produce sustainable aviation fuel, renewable diesel, and hydrogen. GHG emissions generated by project-related passenger and truck vehicular travel would benefit from the above regulations and programs, and mobile source emissions generated by the proposed project would be reduced with implementation of the wider use of zero-carbon fuels consistent with reduction of GHG emissions under AB 1279. Thus, the proposed project would not conflict with actions in the transportation fuels sector.
Vehicles Miles Traveled Sector		
• Achieve a per capita VMT reduction of at least 25 percent below 2019 levels by 2030 and 30 percent below 2019 levels by 2045. • Reimagine new roadway projects that decrease VMT in a way that meets community needs and reduces the need to drive. • Invest in making public transit a viable alternative to driving by increasing affordability, reliability, coverage, service frequency, and consumer experience.	State agencies and local agencies	**No Conflict.** Managing total demand for transportation energy by reducing the miles people need to drive on a daily basis is also critical as the state aims for a sustainable transportation sector in a carbon neutral economy. VMT reductions will play an indispensable role in reducing overall transportation energy demand and achieving the state's climate, air quality, and equity goals. CARB did not set regulatory limits on VMT in the 2022 Scoping Plan because the authority to reduce VMT largely lies with state, regional, and local transportation, land use,

TABLE 7
CONSISTENCY ANALYSIS WITH APPLICABLE 2022 SCOPING PLAN ACTIONS AND STRATEGIES

2022 Scoping Plan Action	Responsible Party(ies)	Consistency Analysis
• Implement equitable roadway pricing strategies based on local context and need, reallocating revenues to improve transit, bicycling, and other sustainable transportation choices • Expand and complete planned networks of high-quality active transportation infrastructure. • Channel the deployment of autonomous vehicles, ride-hailing services, and other new mobility options toward high passenger-occupancy and low VMT-impact service models that complement transit and ensure equitable access for priority populations. • Streamline access to public transportation through programs such as the California Integrated Travel Project. • Ensure alignment of land use, housing, transportation, and conservation planning in adopted regional plans, such as regional transportation plans (RTP)/ sustainable communities strategies (SCS), regional housing needs assessments (RHNA), and local plans (e.g., general plans, zoning, and local transportation plans), and develop tools to support implementation of these plans. • Accelerate infill development and housing production at all affordability levels in transportation-efficient places, with a focus on housing for lower income residents.		and housing agencies, along with the Legislature and its budgeting choices. Although the proposed project would introduce GHGs into the environment, it would locate a rebar plant in California which would deliver product to California and Mexico. As discussed in the traffic impact study report[148], without the proposed project bulk steel materials would be imported from out of state (Washington, Utah, Oregon, and Arizona) into California. The proposed project's location would generate a 41 percent reduction in average VMTs by the Pacific Steel Group fleet and will reduce annual VMT by approximately 7,015,071 miles, thus reducing GHG emissions[149]. Thus, the proposed project supports a reduction in VMT over the state, in accordance with the goals of the 2022 Scoping Plan. As such, the proposed project would not conflict with actions under the vehicle miles traveled sector.
Clean Electricity Grid Sector		
• Use long-term planning processes (Integrated Energy Policy Report, IRP, CAISO Transmission Planning Process, AB 32 Climate Change Scoping Plan) to support grid reliability and expansion of renewable and zero-carbon resource and infrastructure deployment. • Complete systemwide and local reliability assessments across CAISO and other balancing authority areas, using realistic assumptions for land use, build rates, statewide and distribution system level constraints, and energy needs. Such assessments should be completed before state agencies update their electricity sector GHG targets. • Prioritize actions to mitigate impacts to electricity reliability and affordability and provide sufficient flexibility in the state's decarbonization roadmap for adjustments as may be needed.	State agencies and local agencies	**No Conflict.** Decarbonizing the electricity sector depends on both using energy more efficiently and replacing fossil-fueled generation with renewable and zero carbon resources, including solar, wind, energy storage, geothermal, biomass, and hydroelectric power. The RPS Program and the Cap-and-Trade Program continue to incentivize dispatch of renewables over fossil generation to serve state demand. SB 100 increased RPS stringency to require 60 percent renewables by 2030 and for California to provide 100 percent of its retail sales of electricity from renewable and zero-carbon resources by 2045. Furthermore, SB 1020 has added interim targets to SB 100's policy framework to require renewable and zero-carbon resources to supply 90 percent of all retail electricity sales by 2035 and 95 percent of all electricity retail sales by 2040; establish a planning goal of at least 20 GW of offshore wind by 2045; and that state

[148] LAV//Pinnacle Engineering, *Traffic Impact Study for Pacific Steel Group Reinforcing Bar Manufacturing Plant, Kern County, California*, October 10, 2022.

[149] LAV//Pinnacle Engineering, *Traffic Impact Study for Pacific Steel Group Reinforcing Bar Manufacturing Plant, Kern County, California*, October 10, 2022.

TABLE 7
CONSISTENCY ANALYSIS WITH APPLICABLE 2022 SCOPING PLAN ACTIONS AND STRATEGIES

2022 Scoping Plan Action	Responsible Party(ies)	Consistency Analysis
• Facilitate long lead-time resource development through the IRP and the SB 100 interagency process and through technology development and demonstration funding376 that includes resources such as long-duration energy storage and hydrogen production. • Continue coordination between energy agencies and energy proceedings to maximize opportunities for demand response. • Continue to explore the benefits of regional markets to enhance decarbonization, reliability, and affordability. • Address resource build-out challenges, including permitting, interconnection, and transmission network upgrades. • Explore new financing mechanisms and rate designs to address affordability. • Per SB 350, double statewide energy efficiency savings in electricity and fossil gas end uses by 2030, through a combination of energy efficiency and fuel substitution actions. • Per SB 100 and SB 1020, achieve 90 percent, 95 percent, and 100 percent renewable and zero-carbon retail sales by 2035, 2040, and 2045, respectively. • Evaluate and propose, as needed, changes to strengthen the Cap-and-Trade Program. • Target programs and incentives to support and improve access to renewable and zero-carbon energy projects (e.g., rooftop solar, community owned or controlled solar or wind, battery storage, and microgrids) for communities most at need, including frontline, low-income, rural, and indigenous communities. • Prioritize public investments in zero-carbon energy projects to first benefit the most overly burdened communities affected by pollution, climate impacts, and poverty.		agencies plan for an energy transition that avoids the need for new fossil gas capacity to meet California's long-term energy goals. California also continues to advance its appliance and building energy efficiency standards to reduce growth in electricity consumption and meet the SB 350 goal to double statewide energy efficiency savings in electricity and fossil gas end uses by 2030. Increased transportation and building electrification and continued policy commitment to behind-the-meter solar and storage will continue to drive growth of microgrids and other distributed energy resources (DER). Continued transition to renewable and zero-carbon electricity resources will enable electricity to become a zero-carbon substitute for fossil fuels. To reach the 2045 target, the state will need to quadruple its current level of wind and solar capacity. This transformation will drive investments in a large fleet of generation and storage resources but will also require significant transmission to accommodate these new capacity additions. Resources such as storage and demand-side management are essential to maintain reliability with high concentrations of renewables. Hydrogen produced from renewable resources and renewable feedstocks can serve a dual role as a low-carbon fuel for existing combustion turbines or fuel cells, and as energy storage for later use. Although the proposed project would introduce GHGs into the environment, it would implement a solar array and would not utilize any natural gas, as part of the proposed project, to power some of the micro-mill's operations, thus decreasing its reliance on fossil-fuels in support of these actions. As such, the proposed project would not conflict with actions in the clean electricity grid sector.
Sustainable Manufacturing and Buildings Industry Sector		
• Maximize air quality benefits using the best available control technologies for stationary sources in communities most in need, including frontline, low-income, disadvantaged, rural, and tribal communities. • Prioritize alternative fuel transitions first in communities most in need, including frontline, low-income, disadvantaged, rural, and tribal communities. • Invest in research and development and pilot projects to identify options to reduce materials and process emissions along with energy emissions in California's industrial manufacturing facilities, leveraging programs	State agencies and local agencies	**Consistent.** Fossil gas is the primary gaseous fossil fuel used to produce heat at industrial facilities, as well as in residential and commercial buildings. Gaseous fossil fuel use can be displaced by four primary alternatives: zero-carbon electricity, solar thermal heat, hydrogen, and biogas/biomethane. The 2022 Scoping Plan reduces dependence on fossil gas in the industrial and building sectors by transitioning substantial energy demand to alternative fuels. Combustion of fossil gas, other gaseous fossil fuels, and solid fossil fuels provide energy to meet three broad industry needs: electricity, steam, and process heat. Non-combustion emissions result from

TABLE 7
CONSISTENCY ANALYSIS WITH APPLICABLE 2022 SCOPING PLAN ACTIONS AND STRATEGIES

2022 Scoping Plan Action	Responsible Party(ies)	Consistency Analysis
like the CEC's Electric Program Investment Charge (EPIC). • Evaluate and propose, as needed, changes to strengthen the Cap-and-Trade Program. • Support electrification with changes to industrial rate structures. • Develop infrastructure for CCS and hydrogen production to reduce GHG emissions where cost-effective and technologically feasible non-combustion alternatives are not available. • Implement SB 905. • Establish markets for low-carbon products and recycled materials using Buy Clean California Act and other mechanisms relying on robust data • Develop a net-zero cement strategy to meet SB 596 targets for the GHG intensity of cement use in California. • Continue to leverage energy-efficiency programs, including the U.S. DOE's ENERGY STAR program, U.S. DOE's Superior Energy Performance program, and ISO 50001. • Evaluate and continue to offer incentives to install energy efficiency and renewable energy technologies through programs such as CPUC decisions as part of rulemaking R.19-09-009393 and the CEC's Food Production Investment Program (FPIP) and EPIC programs. • Leverage low-carbon hydrogen programs, including the Bipartisan Infrastructure Law, for regional hydrogen hubs, hydrogen electrolysis, and hydrogen manufacturing and recycling. • Evaluate the role of hydrogen in meeting GHG emission reductions, including policy recommendations regarding the use of hydrogen in California as required by SB 1075. • Address cost barriers to promote low-carbon fuels for hard-to-electrify industrial applications.		fugitive emissions and from the chemical transformations inherent to some manufacturing processes. About 20 percent of the GHG emissions from the industrial sector are non-combustion emissions. Decarbonizing industrial facilities depends upon displacing fossil fuel use with a mix of electrification, solar thermal heat, biomethane, low- or zero-carbon hydrogen, and other low-carbon fuels to provide energy for heat and reduce combustion emissions. Emissions also can be reduced by implementing energy efficiency measures and using substitute raw materials that can reduce energy demand and some process emissions. Some remaining combustion emissions and some non-combustion CO2 emissions can be captured and sequestered. This sector has a continuing demand for fossil gas due to lack of non-combustion technologically feasible or cost-effective alternatives for certain industrial sectors. Microgrids powered by renewable resources and with battery storage are emerging as a key enabler of electrification and decarbonization at industrial facilities. The proposed project is an industrial stationary source project that is subject to a PSD permit and as such will utilize BACT to reduce air quality and GHG emissions. Although it requires fossil-fuels to run its processes, the proposed project includes a solar array to power some of its buildings and would not use any natural gas. The proposed project will also take part in the Cap-and Trade Program to reduce its GHG emissions. As such, the proposed project is consistent with measures in the 2022 Scoping Plan.
Sustainable Manufacturing and Buildings Building Sector		
• Prioritize California's most vulnerable residents with the majority of funds in the new $922 million Equitable Building Decarbonization program, created through the 2022–2023 state budget. This would include residents in frontline, low-income, disadvantaged, rural, and tribal communities. This program is dedicated to a statewide direct-install building retrofit program for low-income households to replace fossil fuel appliances with electric appliances, energy-efficient lighting, and building insulation and sealing while also	State agencies and local agencies	**No Conflict.** Achieving carbon neutrality must include transitioning away from fossil gas in residential and commercial buildings and will rely primarily on advancing energy efficiency while replacing gas appliances with non-combustion alternatives. This transition must include the goal of trimming back the existing gas infrastructure, so pockets of gas-fueled residential and commercial buildings do not require ongoing maintenance of the entire limb for gas delivery. Blending low-carbon fuels such as hydrogen and biomethane into the pipeline further displaces fossil gas.

TABLE 7
CONSISTENCY ANALYSIS WITH APPLICABLE 2022 SCOPING PLAN ACTIONS AND STRATEGIES

2022 Scoping Plan Action	Responsible Party(ies)	Consistency Analysis
coordinating reductions in gas infrastructure in specific geographic areas. • Achieve three million all-electric and electric-ready homes by 2030 and seven million by 2035 with six million heat pumps installed statewide by 2030. • Expand incentive programs to support the holistic retrofit of existing buildings, especially for vulnerable communities. • Ensure that incentive programs prioritize energy affordability and tenant protections, promote affordable and low-income household retrofits that improve habitability and reduce expenses, protect and empower small landlords and homeowners, address overlooked consumer groups, and pair decarbonization with other critically needed renovation efforts to ensure that buildings support human health and are climate- and weather-resistant. • End fossil gas infrastructure expansion for newly constructed buildings. • Evaluate and propose, as needed, changes to strengthen the Cap-and-Trade Program. • Strengthen California's building standards to support zero-emission new construction. • Develop building performance standards for existing buildings. • Adopt a zero-emission standard for new space and water heaters sold in California beginning in 2030, as specified in the 2022 State Strategy for the State Implementation Plan. • Expand use of low-GWP refrigerants within buildings. • Support electrification with changes to utility rate structures and by promoting load management programs. • Increase funding for incentive programs and expand financing assistance programs focused on existing buildings and appliance replacements. • Expand consumer education efforts to raise awareness and stimulate the adoption of decarbonized buildings and appliances, especially in vulnerable communities. • Implement biomethane procurement targets for investor-owned utilities as specified in SB 1440 (Hueso, Chapter 739, Statutes of 2018) to reduce GHG emissions in remaining pipeline gas and reduce methane emissions from organic waste.		Pipeline safety and reliability must be evaluated to accommodate low-carbon fuels. This transition is achieved when all new buildings constructed include non-combustion appliances, and appliances in existing buildings are replaced at the end of their useful life with non-combustion alternatives. The proposed project would not conflict with policies or actions to decarbonize the building sector and would comply with the 2022 CalGreen Code for energy efficiency.
Carbon Dioxide Removal and Capture Sector		
• Implement SB 905 • Convene a multi-agency Carbon Capture and Sequestration Group comprised of	State agencies and local agencies	**No Conflict.** The deployment of CDR to counterbalance hard-to-abate residual emissions is unavoidable if net zero CO2 or GHG emissions are to be achieved. Modeling

TABLE 7
CONSISTENCY ANALYSIS WITH APPLICABLE 2022 SCOPING PLAN ACTIONS AND STRATEGIES

2022 Scoping Plan Action	Responsible Party(ies)	Consistency Analysis
federal, state, and local agencies to engage with environmental justice advocates, tribes, academics, researchers, and community representatives to identify the current status, concerns, and outstanding questions concerning CCS, and develop a process to engage with communities to understand specific concerns and consider guardrails to ensure safe and effective deployment of CCS. • Iteratively update the CARB CCS Protocol with the best available science and implementation experience. • Incorporate CCS into other sectors and programs beyond transportation where cost-effective and technologically feasible options are not currently available and to achieve the 85 percent reduction in anthropogenic sources below 1990 levels as called for in AB 1279. • Evaluate and propose, as appropriate, financing mechanisms and incentives to address market barriers for CCS and CDR. • Evaluate and propose, as appropriate, the role for CCS in cement decarbonization (SB 596) and as part of hydrogen production pathways (SB 1075). • Support carbon management infrastructure projects through core CEC research, development, and demonstration (RD&D) programs. • Continue to explore carbon capture applications for producing or leveraging zero-carbon power for reliability needs as part of SB 100. • Consider carbon capture infrastructure when developing hydrogen roadmaps and strategy, especially for non-electrolysis hydrogen production. • Evaluate and streamline permitting barriers to project implementation while protecting public health and the environment. • Explore options for how local air quality benefits can be achieved when CCS is deployed. • Explore opportunities for CCS and CDR developers to leverage existing infrastructure, including subsurface infrastructure. • Explore permitting options to allow for scaling the number of sources at carbon sequestration hubs.		shows that emissions from the AB 32 GHG Inventory sources will continue to persist even if all fossil related combustion emissions are phased out. These residual emissions must be compensated for to achieve carbon neutrality wither with CDR, which includes both sequestration in natural and working lands and mechanical approaches like direct air capture, CCS, which is carbon capture from anthropogenic point sources involves capturing carbon from a smokestack of an emitting facility, or direct air capture, which captures carbon directly from the atmosphere. The proposed project would not conflict with measures to increase carbon dioxide removal and capture. The proposed project is an industrial stationary source project that is subject to a PSD permit and as such will utilize BACT to reduce air quality and GHG emissions. Although it requires fossil-fuels to run its processes, the proposed project includes a solar array to power some of its buildings and will not use natural gas. The proposed project will also take part in the Cap-and Trade Program to reduce its GHG emissions. As such, the proposed project is consistent with measures in the 2022 Scoping Plan.
Short-Lived Climate Pollutants (Non-Combustion Gases) Dairy and Livestock Methane Sector		
• Install state of the art anaerobic digesters that maximize air and water quality protection, maximize biomethane capture, and direct biomethane to sectors that are	State agencies and local agencies	**No Conflict.** SLCPs include black carbon, methane, and fluorinated gases. HFCs are the fastest growing source of GHG emissions, primarily driven by their use to replace ozone-depleting substances and an increased

TABLE 7
CONSISTENCY ANALYSIS WITH APPLICABLE 2022 SCOPING PLAN ACTIONS AND STRATEGIES

2022 Scoping Plan Action	Responsible Party(ies)	Consistency Analysis
hard to decarbonize or as a feedstock for energy. • Increase alternative manure management projects, including but not limited to conversion to "solid," "dry," or "scrape" manure management; installation of a compost-bedded pack barn; an increase in the time animals spend on pasture; and implementation of solid-liquid separation technology into flush manure management systems. • Implement enteric fermentation strategies that are cost-effective, scientifically proven, safe for animal and human health, and acceptable to consumers, and that do not impact animal productivity. Provide financial incentives for these strategies as needed. • Accelerate demand for dairy and livestock product substitutes such as plant-based or cell-cultured dairy and livestock products to achieve reductions in animal populations. • In consideration of pace of deployment of methane mitigation strategies and the scale of complimentary incentives, consider regulation development to ensure that the 2030 target is achieved, assuming the conditions outlined in SB 1383 are met.		demand for cooling and refrigeration. Dairy and livestock are the largest source of methane emissions followed by landfills. Black Carbon, soot, comes primarily from transportation, specifically heavy-duty vehicles followed by fuel combustion for residential, commercial, and industrial applications. The proposed project would not conflict with SLCP dairy and livestock methane sector actions in the 2022 Scoping Plan. The proposed project is an industrial stationary source project that does not include dairy or livestock.
Short-Lived Climate Pollutants (Non-Combustion Gases) Landfill Methane Sector		
• Maximize existing infrastructure and expand it to reduce landfill disposal, with strategies including composting, anaerobic digestion, co-digestion at wastewater treatment plants, and other non-combustion conversion technologies. • Expand markets for products made from organic waste, including through recognition of the co-benefits of compost, biochar, and other products. • Recover edible food to combat food insecurity. • Invest in the infrastructure needed to support growth in organic recycling capacity. • Utilize existing digesters at wastewater treatment facilities to rapidly expand food waste digestion capacity. • Direct biomethane captured from landfills and organic waste digesters to sectors that are hard to decarbonize. • Implement improved technologies and best management practices at composting and digestion operations. • Reduce emissions from landfills through improvements in operational practices, lower permeability covers, advanced collection systems, and technologies to utilize landfill gas.	State agencies and local agencies	**No Conflict.** SB 1383 has a 75 percent organic waste disposal reduction target below the 2013 baseline by 2030. The state did not achieve the 50 percent reduction in organic waste disposal below 2014 levels by 2020. The CPUC approved a decision in February 2022 implementing the biomethane procurement program, which will require investor-owned utilities by 2025 to procure 17.6 billion cubic feet (BCF) of biomethane produced from organic wastes to support the landfill disposal reduction and SLCP target and reduce fossil gas reliance for residential and commercial customers. Organic waste will also be reduced by measure to remove edible food from the stream. Emissions can also be reduced by improvements in operational practices at landfills including lower permeability covers, advanced landfill gas collection systems, and increased monitoring to detect and repair leaks The proposed project would not conflict with SLCP landfill methane sector actions in the 2022 Scoping Plan. The proposed project is an industrial stationary source project that does not include a landfill.

TABLE 7
CONSISTENCY ANALYSIS WITH APPLICABLE 2022 SCOPING PLAN ACTIONS AND STRATEGIES

2022 Scoping Plan Action	Responsible Party(ies)	Consistency Analysis
• Leverage advances in remote sensing capabilities to quickly pinpoint large methane sources and mitigate leaks, improve understanding of the factors that lead to better capture efficiency, and explore new technologies and practices that can reliably improve methane control at landfills.		
Short-Lived Climate Pollutants (Non-Combustion Gases) Upstream Oil and Gas Methane Sector		
• Mitigate emissions from leaks by regular leak detection and repair (LDAR) surveys at all facilities. • Replace high emitting equipment with zero emission alternatives wherever feasible. • Have CARB and CalGEM lead a Task Force to identify and address methane leaks from oil infrastructure near communities. • Pursuant to SB 1137, develop leak detection and repair plans for facilities in health protection zones, implement emission detection system standards, and provide public access to emissions data. • Minimize emissions from equipment that must vent fossil gas by design (e.g., fossil gas powered compressors). • Install vapor collection systems on high emitting equipment. • Phase out venting and routine flaring of associated gas (gas produced as a by-product during oil production). • Continuous ambient monitoring at fossil gas underground storage facilities to quickly detect large methane sources. • Reduce pipeline and compressor blowdown emissions. • Leverage advances in remote sensing capabilities to quickly pinpoint large methane sources and mitigate leaks.	State agencies and local agencies	**No Conflict.** California is currently on track to achieve a 41 percent reduction in methane emission from oil and gas production by 2025 relative to 2013. To meet the 2030 target, regulatory requirements to further reduce intentional venting of fossil gas from equipment are needed. The proposed project would not conflict with SLCP upstream oil and gas methane sector actions in the 2022 Scoping Plan. The proposed project is an industrial stationary source project that does not include any oil or gas production, processing, or storage facilities.
Short-Lived Climate Pollutants (Non-Combustion Gases) Hydrofluorocarbons Sector		
• Expand the use of very low- or no-GWP technologies in all HFC end-use sectors, including emerging sectors, like heat pumps for applications other than space conditioning, to maximize the benefits of building decarbonization. • Convert large HFC emitters such as existing refrigeration systems to the lowest practical GWP technologies. • Prioritize small-scale and independent grocers serving priority populations in addressing existing “banks” of high-GWP refrigerants • Improve recovery, reclamation, and reuse of refrigerants by limiting sales of new or virgin high-GWP refrigerants and requiring the use of reclaimed refrigerants where appropriate.	State agencies and local agencies	**No Conflict.** New targeted measures are needed to reduce HFCs, primarily from high-GWP refrigerants, to meet 2045 requirements. HFC emissions from new and existing sources need to be addressed in tandem with building decarbonization efforts to maximize reductions. The adoption of low-GWP refrigerants must occur in parallel with building decarbonization efforts. The sales prohibitions on newly produced refrigerants set forth in SB 1206 and the national/international HFC phasedown will help in reducing HFC emissions from existing equipment by restricting the supply of and increasing the value of existing high-GWP HFCs. The proposed project would not conflict with SLCP hydrofluorocarbons sector actions in the 2022 Scoping Plan. The project is an

TABLE 7
CONSISTENCY ANALYSIS WITH APPLICABLE 2022 SCOPING PLAN ACTIONS AND STRATEGIES

2022 Scoping Plan Action	Responsible Party(ies)	Consistency Analysis
• Assist low-income and disadvantaged communities in obtaining low-GWP space conditioning units to protect vulnerable communities from heat stress and wildfire smoke. • Accelerate technology transitions in California and the U.S. overall by collaborating with international partners committed to taking action on HFCs under the Kigali Amendment to the Montreal Protocol; this includes addressing barriers to adoption of very low- or no-GWP refrigerant technologies such as high upfront costs, shortage of trained technicians, and lag in updating safety standards and building codes.		industrial stationary source project that would comply with the 2022 CalGreen Code for energy efficiency and use of high-GWP refrigerants and would not conflict with these policies or actions.
Short-Lived Climate Pollutants (Non-Combustion Gases) Anthropogenic Black Carbon Sector		
• Reduce fuel combustion commensurate with state's climate and air quality programs, particularly from reductions in transportation emissions and agricultural equipment emissions. • Invest in residential woodsmoke reduction.	State agencies and local agencies	**No Conflict.** Under current strategies, anthropogenic black carbon from transportation is expected to be reduced by over 60 percent in 2030. Continued reductions in combustion emissions across all sectors from both the state's climate and air quality programs will also reduce anthropogenic black carbon emissions. The proposed project would not conflict with SLCP anthropogenic black carbon sector actions in the 2022 Scoping Plan. The proposed project is an industrial stationary source project that would reduce VMTs which also results in a reduction of fuel combustion.
Natural and Working Lands: Strategies for all NWL		
• Implement AB 1757 and SB 27. • Implement the Climate Smart Strategy. • Accelerate the pace and scale of climate smart action, consistent with the management levels identified above, as part of a collective effort between federal, state, private, nonprofit, and individual land managers. • Prioritize and practice equity, including through meaningful community engagement and prioritizing implementation of nature-based solutions that benefit the communities most vulnerable to climate change. • Advance multi-benefit, collaborative, landscape-level approaches that engage communities and landowners, and incorporate adaptive managements. • Consult and partner with California Native American tribes to increase co-management and tribal management authority; restore, protect, and enhance natural cultural resources, traditional foods, and cultural landscapes; respect tribal sovereignty; and support tribes' implementation of tribal	State agencies and local agencies	**No Conflict.** AB 1757 calls for the development of an ambitious range of targets for the NWL sector to be integrated into the Scoping Plan and other state policies. SB 27 directed CARB to establish CO2 removal targets for 2030 and beyond. In response to EO N-82-20 and AB 1757, the proposed target for NWL for 2045 is a -4 percent change in total carbon stock from 2014. The proposed project would not conflict with NWL strategies for all NWL actions under the 2022 Scoping Plan. The proposed project is an industrial project which would not be constructed on any NWL.

TABLE 7
CONSISTENCY ANALYSIS WITH APPLICABLE 2022 SCOPING PLAN ACTIONS AND STRATEGIES

2022 Scoping Plan Action	Responsible Party(ies)	Consistency Analysis
expertise and Traditional Ecological Knowledge and cultural easements. • Leverage existing innovative financial and market mechanisms, and explore new ones, between the public, private, and philanthropic sectors to secure funding of climate smart land management. • In partnership with communities, tribes, and the private sector, expand and develop new infrastructure for manufacturing and processing of climate smart agricultural and biomass products. • Leverage and support technical assistance providers: such as the UC Cooperative Extension and California's 98 Resource Conservation Districts, that have track records of providing technical assistance to local landowners and implementing agriculture, forestry, natural resource management, and restoration projects across the state. • Establish and expand mechanisms that ensure NWL are protected from land conversion and parcelization (e.g., conservation easements or Williamson Act), in line with the strategies outlined in CNRA's Pathways to 30x30 California. Pair land conservation projects with management plans that increase carbon sequestration, where feasible. • Increase opportunities for private and philanthropic investments in nature-based climate solutions, utilizing existing voluntary and compliance carbon markets, existing state and local programs, and the California Carbon Sequestration and Climate Resiliency Project Registry established pursuant to SB 27. • Expand monitoring and tracking of management actions and outcomes consistent with the tracking and monitoring recommendations of the Climate Smart Strategy		
Natural and Working Lands: Forest Shrublands and Chaparral		
• Accelerate the pace and scale of climate smart forest management to at least 2.3 million acres annually by 2025, in line with the climate smart management strategies identified in this Scoping Plan, the NWL Climate Smart Strategy, and the Wildfire and Forest Resilience Action Plan. • Establish and expand mechanisms that ensure forests, shrublands, and grasslands are protected from land conversion and that support ongoing, rather than one-time, management actions. • In collaboration with state and local agencies, accelerate the deployment of long-term carbon storage from waste woody	State agencies and local agencies	**No Conflict.** California is covered by 27 percent forests and 31 percent shrublands and chaparral. Climate smart management can help make forests more resilient to climate change and less prone to catastrophic wildfire. Climate-smart management in shrublands and chaparral face can provide protection for threatened communities and natural resources. The proposed project would not conflict with NWL strategies for forest, shrublands, and chaparral actions under the 2022 Scoping Plan. The proposed project is an industrial project which would not be constructed on any

TABLE 7
CONSISTENCY ANALYSIS WITH APPLICABLE 2022 SCOPING PLAN ACTIONS AND STRATEGIES

2022 Scoping Plan Action	Responsible Party(ies)	Consistency Analysis
biomass residues resulting from climate smart management, including storage in durable wood products, underground reservoirs, soil amendments, and other mediums. • Expand infrastructure to facilitate processing of biomass resulting from climate smart management. • Expand permit streamlining in collaboration with state and local agencies to accelerate implementation of climate smart forest management while protecting natural resources.		NWL where forests, shrublands, and chaparral occur.
Natural and Working Lands: Grasslands		
• Establish and expand mechanisms that ensure grasslands are protected from land conversion/parcelization and that support ongoing, rather than one-time, management actions that improve carbon sequestration. • Deploy grassland management strategies, like prescribed grazing, compost application, and other regenerative practices, to support soil carbon sequestration, biodiversity, and other ecological improvements. • Increase adoption of compost production on farms and application of compost in appropriate grassland settings for improved vegetation and carbon storage, and to deliver waste diversion goals through nature-based solutions.	State agencies and local agencies	**No Conflict.** California is covered by 9 percent grasslands. The protection of grasslands provides an opportunity to reduce sprawl and complement VMT reduction strategies. Climate smart strategies can increase grassland resilience to climate change by improving species diversity and maintaining or increasing soil carbon stocks. The proposed project would not conflict with NWL strategies for grasslands actions under the 2022 Scoping Plan. The proposed project is an industrial project which would not be constructed on any NWL where grasslands occur.
Natural and Working Lands: Croplands		
• Accelerate the pace and scale of healthy soils practices to 80,000 acres annually by 2025, conserve at least 8,000 acres of annual crops annually, and increase organic agriculture to 20 percent of all cultivated acres by 2045. • Utilize the recommendations included in CDFA's Farmer and Rancher-Led Climate Change Solutions report to accelerate deployment of healthy soils practices, organic farming, and climate smart agriculture practices. • Establish or expand financial mechanisms that support ongoing deployment of healthy soils practices and organic agriculture. • Support strategies that achieve co-benefits of safer, more sustainable pest management practices and the health and preservation of ecosystems, such as implementing the California Department of Pesticide Regulation's (DPR's) Sustainable Pest Management Work Group recommendations. • Conduct research on the intersection of pesticides, soil health, GHGs, and pest	State agencies and local agencies	**No Conflict.** California is covered by 9 percent croplands. In addition to food, croplands provide considerable carbon storage in the soil and, in perennial croplands, in aboveground biomass. Climate smart practices can maintain or increase the climate resilience of cropland productivity through improved soil conditions and increased pollinator habitat. The proposed project would not conflict with NWL strategies for croplands actions under the 2022 Scoping Plan. The proposed project is an industrial project which would not be constructed on any NWL where croplands currently occur.

TABLE 7
CONSISTENCY ANALYSIS WITH APPLICABLE 2022 SCOPING PLAN ACTIONS AND STRATEGIES

2022 Scoping Plan Action	Responsible Party(ies)	Consistency Analysis
resiliency via a multi-agency effort with DPR, CDFA, and CARB. • Conduct outreach and education to develop and facilitate the increased adoption of safer, more sustainable pest management practices and tools; reduce the use of harmful pesticides; promote healthy soils; improve water and air quality; and reduce public health impacts. • In collaboration with state and local agencies, accelerate the deployment of alternatives to agricultural burning that increase long-term carbon storage from waste agricultural biomass, including storage in durable wood products, underground reservoirs, soil amendments, and other mediums. • Work across state agencies to reduce regulatory and permitting barriers around some healthy soils practices (e.g., composting), where appropriate. • Utilize innovative agriculture energy use and carbon monitoring and planning tools to reduce on-farm GHG emissions from energy and fertilizer application or to increase carbon storage, as well as to promote on-farm energy production opportunities.		
Natural and Working Lands: Wetlands		
• Restore 60,000 acres of Delta wetlands annually by 2045 to reduce methane emissions from wetlands and reverse the resulting subsidence. • Identify and prioritize wetland restoration efforts around climate vulnerable communities. • Leverage other funding and institutions to support wetland restoration projects, including land trusts, local funding, federal funding, and private and philanthropic funding to support wetlands restoration projects. • Work across state agencies to reduce regulatory and permitting barriers around wetland restoration projects, where appropriate.	State agencies and local agencies	**No Conflict.** California is covered by 2 percent wetlands. Wetlands are hotspots for diversity, contain considerable carbon in the soil, are critical to the states' water supply, and protect upland areas from flooding due to sea level rise and storms. Climate smart strategies to restore and protect wetlands can reduce emissions while simultaneously improving the climate resilience of surrounding areas and improving the water quality and yield for the state. The proposed project would not conflict with NWL strategies for wetlands actions under the 2022 Scoping Plan. The proposed project is an industrial project which would not be constructed on any NWL where wetlands occur.
Natural and Working Lands: Developed Lands		
• Increase urban forestry investment annually by 200 percent, relative to business as usual. • Increase public awareness of urban forest benefits and, where appropriate, prioritizing irrigation of trees over lawns. • Provide technical assistance and resources to disadvantaged communities to implement community urban greening projects to provide equitable access to the benefits of urban greening projects.	State agencies and local agencies	**No Conflict.** California is covered by 6 percent developed lands. Developed lands include urban, suburban, and rural areas, as well as transportation and supporting infrastructure. The vegetation within cities and communities are all part of developed lands. This vegetation provides numerous benefits to surrounding areas, including carbon storage, air and water filtration, reduced urban heat island effect, and access to nature, Climate smart strategies to protect and expand the urban forests, landscaping, green spaces, parks, and associated vegetation can increase their

TABLE 7
CONSISTENCY ANALYSIS WITH APPLICABLE 2022 SCOPING PLAN ACTIONS AND STRATEGIES

2022 Scoping Plan Action	Responsible Party(ies)	Consistency Analysis
• Work with state and local agencies to expand technical assistance for and enforcement of the defensible space requirements of PRC 4291 to reduce wildfire risk to homes and structures.		climate resilience and the benefits Californians derive from them. Urban forests have a significant potential to sequester carbon. The proposed project would not conflict with NWL strategies for developed lands actions under the 2022 Scoping Plan. The proposed project is an industrial project which would be constructed on developed lands. Additionally, the proposed project proposes landscaping would be provided in three distinct areas of the project site.
Natural and Working Lands: Vegetated Lands		
• Establish and expand mechanisms that ensure sparsely vegetated lands are protected from land conversion, prioritizing those areas most vulnerable to climate change and loss.	State agencies and local agencies	**No Conflict.** California is covered by 10 percent sparsely vegetated lands. Vegetated lands include deserts, beaches, dunes, bare rock, and areas covered in ice and snow. Vegetated lands provide limited carbon storage, but nonetheless, are important for open space, unique habitats, and recreational opportunities. The proposed project would not conflict with NWL strategies for vegetated lands actions under the 2022 Scoping Plan. The proposed project is an industrial project which would not be constructed on vegetated lands.

SOURCE: ESA 2023.

The proposed project would generate an incremental contribution to and a cumulative increase in GHG emissions. A specific discussion regarding potential GHG emissions associated with the construction and operational phases of the proposed project is provided below. As shown in Table 6, the proposed project's GHG emissions exceed the significance threshold. However, in compliance with the EKAOCD CEQA GHG Policy, if the proposed project is subject to a state or federal GHG emission reduction plan or program and demonstrate that it will be in compliance with the plan or program, impacts would be less than significant. As discussed above, the proposed project is in compliance or would not conflict with KCOG's 2022 RTP/SCS, CARB's 2022 Scoping Plan, SB 32, and AB 1279. Furthermore, Since the proposed project has demonstrated compliance with SB 32, AB 1279, and the Cap-and-Trade Program, demonstrating the proposed project's compliance with option (1), compliance with a state GHG reduction plan reducing projects impacts to less than significant.

Additionally, the proposed project will be subject to permitting requirements through the EKAPCD; Rule 201.1 Permit to Operate for Sources Subject to Title V of the Federal Clean Air Act Amendments of 1990, Rule 210.1 New and Modified Stationary Source Review (NSR), Rule 210.1A Major New and Modified Source Review (MNSR), and Rule 210.4 Prevention of Significant Deterioration (PSD). These rules require that the emissions of the new stationary source do not interfere with attainment of ambient air quality standards, ensure construction utilizing BACT, ensure no significant net increase for all non-attainment pollutants and their

precursors or provide offsets for any significant net emissions increase of a nonattainment pollutant. Eastern Kern County is in nonattainment for the 8-hour ozone standard. Some of the ozone precursors are carbon monoxide, methane, and nitrogen oxide some of which happen to be greenhouse gases or help form GHGs Thus, by adhering to the permit requirements, GHG emissions will be controlled to ensure that ambient air quality standards can be attained.

SCE is subject to compliance with the RPS, which requires utilities to source 60 percent renewable energy by December 31, 2030 and to plan for 100 percent renewable energy by December 31, 2045. The proposed project would benefit from SCE's compliance with RPS and GHG emissions would decrease as grid-generated electricity reaches a higher percentage of renewable energy. Additionally, the proposed project includes solar panels to run the energy needs of the EAF and LMS.

CARB approved the Advanced Clean Cars Program, which includes low-emission vehicle regulations that reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles, and the zero-emissions vehicle regulation, which requires manufacturers to produce an increasing number of pure zero-emissions vehicles (meaning battery electric and fuel cell electric vehicles), with provisions to also produce plug-in hybrid electric vehicles in the 2018 through 2025 model years. CARB also approved the Advanced Clean Cars II Program, for model years 2026 through 2035, which requires that all new passenger cars, trucks and SUVs sold in California be zero emissions by 2035. The regulation amends the Zero-emission Vehicle Regulation to require an increasing number of zero-emission vehicles, and relies on advanced vehicle technologies, including battery-electric, hydrogen fuel cell electric and plug-in hybrid electric-vehicles, to meet air quality and climate change emissions standards, in support of EO N-79-20.The proposed project would comply with CALGreen requirements meeting the number of electric-vehicle-ready and electric-vehicle-capable parking spaces to support zero-emissions vehicles and plug-in hybrid electric vehicles. As such, the proposed project would support compliance with these regulations. Further, the proposed project would benefit from implementation of the Advanced Clean Truck Regulation which aims to increase zero-emissions truck sales annually. By 2035, zero-emissions truck/chassis sales would need to be 55 percent of Classes 2b–3 truck sales, 75 percent. Because deliveries to the proposed project and product deliveries would be made by trucks subject to this regulation, the proposed project would benefit from these measures.

Although the proposed project would result in emissions exceeding 25,000 $MTCO_2e$/year, the impacts are determined to be less than significant because the proposed project demonstrates compliance with option (1) compliance with applicable state GHG reduction plan. For the reasons described above, the proposed project's emissions trajectory is expected to follow a declining trend, consistent with the establishment of the 2030 and 2045 targets established by SB 32, AB 1279, and the 2022 Scoping Plan. Therefore, given the proposed project's GHG emissions efficiency and the proposed project's consistency analysis with applicable GHG plans, policies and regulations adopted for the purpose of reducing GHG emissions, impacts regarding GHG emissions and reduction plans would be less than significant.

5.1.4 Cumulative GHG Impacts

CEQA requires that lead agencies consider the cumulative impacts of GHG emissions from even relatively small (on a global basis) increases in GHG emissions. Small contributions to this cumulative impact (from which significant effects are occurring and are expected to worsen over time) may be potentially considerable and therefore significant. In the case of global climate change, the proximity of the proposed project to other GHG emissions generating activities is not directly relevant to the determination of a cumulative impact because climate change is a global condition. GHG emission impacts are, by their very nature cumulative, as both the California Natural Resources Agency and CAPCOA have recognized.[150] Therefore, an analysis of a proposed project's GHG emission impacts also serves as a cumulative impact assessment.

Although HSC Division 25.5 sets a statewide target for statewide 2020 and 2030 GHG emission levels, its implementing tools (e.g., CARB's *Climate Change Scoping Plan*) make clear that the reductions are not expected to occur uniformly from all sources or sectors. CARB has set targets specific to the transportation sector (land use-related transportation emissions), for example, and under SB 375, KCOG must incorporate these GHG-reduction goals into its Regional Transportation Plan and demonstrate that its Sustainable Communities Strategy is consistent with the Regional Housing Needs Assessment. One of the goals of this process is to ensure that the efforts of State, regional and local planning agencies accommodate the contemporaneous increase in population and employment with a decrease in overall GHG emissions. Although this proposed project would introduce GHGs into the environment, it would locate a rebar plant in California which would deliver product to California and Mexico. As discussed in the traffic impact study report[151], without the proposed project, bulk steel materials need to be imported from out of state (Washington, Utah, Oregon, and Arizona) into California. The proposed project location will generate a 41 percent reduction in average miles traveled by the Pacific Steel Group fleet and would reduce annual VMT by approximately 7,015,071 miles, thus reducing GHG emissions.[152] Thus, this proposed project supports a reduction in VMT over the state, in accordance with the goals of the 2022 RTP/SCS.

With implementation of good planning policies, the land use sector can accommodate growth and not conflict with statewide plans to reduce GHG emissions. To that end, various agencies are required to develop programs to guide future building and transportation development toward minimizing resource consumption and reducing resultant pollution. As discussed above, the County has adopted a Green Building Code that includes mandatory measures to minimize and reduce GHG emissions from energy consumption.

As discussed in the tables above, the proposed project's design and location would not conflict with applicable GHG reduction strategies recommended by the State and region. In addition, the proposed project would support and not conflict with relevant and applicable GHG emission

[150] California Air Pollution Control Officers Association, CEQA & Climate change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act, (2008).

[151] LAC//Pinnacle Engineering, *Traffic Impact Study for Pacific Steel Group Reinforcing Bar Manufacturing Plant, Kern County, California*, October 10, 2022.

[152] LAC//Pinnacle Engineering, *Traffic Impact Study for Pacific Steel Group Reinforcing Bar Manufacturing Plant, Kern County, California*, October 10, 2022.

reduction strategies in KCOG's 2022 RTP/SCS. Furthermore, the overwhelming majority of the proposed project related GHG emissions are from highly regulated source sectors, manufacturing, electricity generation, and transportation fuels. These sectors are already covered entities under the Renewables Portfolio Standard and the Cap-and-Trade Program and as such would be reduced sector-wide in accordance with the GHG reduction targets of HSC Division 25.5, in addition to the previously discussed GHG emissions reductions from the project-specific energy efficiency design features, and substantial VMT-reducing characteristics of the proposed project.

As indicated above, the CEQA Guidelines were amended in response to SB 97. In particular, the CEQA Guidelines were amended to specify that compliance with a GHG emissions reduction program renders a cumulative impact insignificant. Per CEQA Guidelines Section 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the proposed project would comply with an approved plan or mitigation program that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area of the proposed project.[153] To qualify, such a plan or program must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency.[154] Examples of such programs include a "water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plan, [and] **plans or regulations for the reduction of greenhouse gas emissions**" (emphasis added).[155] Put another way, CEQA Guidelines Section 15064(h)(3) allows a lead agency to make a finding of non-significance for GHG emissions if a project complies with the California Cap-and-Trade Program or other regulatory schemes to reduce GHG emissions.

Given that the proposed project would generate GHG emissions that would not conflict with applicable GHG reduction plans and policies, as discussed in Section 5.1.3, above, and given that GHG emission impacts are cumulative in nature, the proposed project's incremental contribution to cumulatively significant GHG emissions would be less than cumulatively considerable, and impacts would be less than significant.

5.2 Energy Impacts

Impact EN-1: Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.

Impact EN-2: Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

[153] 14 CCR § 15064(h)(3).
[154] 14 CCR § 15064(h)(3).
[155] 14 CCR § 15064(h)(3).

Impact EN-1: The proposed project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.

5.2.1 Construction

It is anticipated that construction activities would commence as early as the fourth quarter of 2023 with full build-out occurring in the fourth quarter of 2025, for a total of 24 months of construction. During construction of the proposed project, energy would be consumed in the form of electricity for powering the construction trailers (lights, electronic equipment, and heating and cooling) and exterior uses, such as lights, water conveyance for dust control, and other construction activities. Natural gas would not be for construction purposes. Project construction would also consume energy in the form of petroleum-based fuels associated with the use of off-road construction vehicles and equipment on the project site, construction workers travel to and from the project site, and delivery and haul truck trips (e.g., hauling of demolition material to off-site reuse and disposal facilities). **Table 8,** *Proposed Project Construction Energy Usage*, provides a summary of the annual average electricity, gasoline fuel, and diesel fuel estimated to be consumed during construction of the proposed project.

TABLE 8
PROPOSED PROJECT CONSTRUCTION ENERGY USAGE

Energy Type	Total Quantity [b]	Annual Average Quantity During Construction [b c]
Electricity		
Temporary Construction Trailer	52 MWh	26 MWh
Electricity from Water (Dust Control)	292 MWh	146 MWh
Electric Offroad Equipment	2,044 MWh	1,022 MWh
Total Electricity	**2,389 MWh**	**1,194 MWh**
Gasoline		
On-Road Construction Equipment	472,179 gallons	236,090 gallons
Total Gasoline	**472,179 gallons**	**236,090 gallons**
Diesel		
On-Road Construction Equipment	488,595 gallons	244,297 gallons
Off-Road Construction Equipment	3,380,569gallons	1,690,285gallons
Total Diesel	**3,869,164 gallons**	**1,934,582 gallons**

MWh = megawatt-hours

[a] Detailed calculations are provided in Appendix B, of this Technical Report.

[b] Totals may not add up due to rounding of decimals.

[c] Fuel totals include water line construction and traffic improvements that occur in 2025. Traffic improvements occurring in 2041 would last less than 20 days and fuel consumption would be negligible.

SOURCE: ESA, 2022; CalEEMod, 2022; EMFAC2021.

Electricity

During construction of the proposed project, electricity would be consumed, on a limited basis, to power lighting, electric equipment, and supply and convey water for dust control. Electricity would be supplied to the project site by SCE and would be obtained from the existing electrical lines that connect to the project site.

As shown in Table 8, annual average construction electricity usage would be approximately 1,194 MWh. The electricity demand would be within the supply and infrastructure capabilities of SCE (which reported 82,048 GWh of total energy sales in the 2021).[156] The electricity demand at any given time would vary throughout the construction period based on the construction activities being performed and would cease upon completion of construction. Electricity use from construction would be short-term, limited to working hours, used for necessary construction-related activities, and represent a small fraction of the proposed project's net annual operational electricity. Therefore, the proposed project would not result in a wasteful, inefficient, and unnecessary consumption of energy associated with electricity used for construction, and impacts would be **less than significant**.

Natural Gas

As previously stated above, construction activities, including the construction of new buildings and facilities, typically do not involve the consumption of natural gas. Accordingly, natural gas would not be supplied to support project construction activities; thus, there would be no expected demand generated by construction of the proposed project. Therefore, the proposed project would not result in the wasteful, inefficient, and unnecessary consumption of energy associated with natural gas used for construction and impacts would be **less than significant**.

Transportation Energy

Table 8 reports the estimated amount of petroleum-based transportation energy that could potentially be consumed during project construction based on the conservative set of assumptions provided in Appendix B, of this Technical Report. During project construction, on- and off-road vehicles would consume an estimated annual average of approximately 236,090 gallons of gasoline fuel and approximately 1,934,582 gallons of diesel over the approximately 24 months of construction.

Construction of the proposed project would utilize fuel-efficient trucks and equipment consistent with federal and State regulations, such as fuel efficiency regulations in accordance with CARB's Pavley Phase I and II standards and the revised SAFE Vehicles Rule, the anti-idling regulation in accordance with CCR, Title 13, Section 2485, and fuel requirements in accordance with CCR, Title 17, Section 93115, as well as the In-Use Off-Road Diesel-Fueled Fleets regulation[157]. As such, the proposed project would comply with State measures to reduce the inefficient, wasteful, and unnecessary consumption of energy, such as petroleum-based transportation fuels. While these regulations are intended to reduce construction emissions, compliance with the anti-idling

[156] SCE, *2021 Annual Report*, February 24, 2022. https://www.edison.com/content/dam/eix/documents/investors/sec-filings-financials/2021-eix-sce-annual-report.pdf. Accessed October 2021.

[157] CARB, In-Use Off-Road Diesel-Fueled Fleets Regulation, 2022. https://ww2.arb.ca.gov/our-work/programs/use-road-diesel-fueled-fleets-regulation. Accessed October 2022.

and emissions regulations discussed above would also result in fuel savings from the use of more fuel-efficient engines. Diversion of mixed construction and demolition debris would reduce truck trips to landfills and increase the amount of waste recovered (e.g., recycled, reused, etc.) at material recovery facilities, thereby further reducing transportation fuel consumption.

Based on the analysis above, construction would utilize energy only for necessary on-site activities and to transport construction materials, excavated fill, and demolition debris to and from the project site. As discussed above, idling restrictions and the use of cleaner, energy-efficient equipment would result in less fuel combustion and energy consumption and, thus, reduce the proposed project's construction-related energy use. Therefore, the proposed project would not result in the wasteful, inefficient, and unnecessary consumption of energy and impacts associated with transportation fuels for construction would be **less than significant**.

5.2.2 Operation

During operation of the proposed project, energy would be consumed for multiple purposes, including, but not limited to, the manufacturing of rebar (micro mill), HVAC, refrigeration, lighting, and the use of electronics, equipment, and appliances. Energy would also be consumed during project operations related to water usage, solid waste disposal, and vehicle trips. **Table 9,** *Proposed Project Operational Electricity Usage*, displays the proposed project's energy demand from electricity, gasoline, and diesel.

TABLE 9
PROPOSED PROJECT OPERATIONAL ELECTRICITY USAGE

Energy Type	Annual Quantity [b,c]
Electricity	
Proposed Project	
Building Energy	248,682 MWh
Water Treatment Plant and Conveyance	1,102 MWh
Offroad Mobile Equipment	173 MWh
Solar Array	(25,550 MWh)
Proposed Project Subtotal	**224,665 MWh**
Diesel and Gasoline	
Proposed Project	
Gasoline - Mobile Sources	347,798 gallons
Diesel – On-road Mobile Sources	1,600,166 gallons
Diesel – Offroad Mobile Sources	301,831 gallons
Diesel – Fuel Tanks	52,000 gallons
Diesel – Emergency Generators	959 gallons
Gasoline – Total	**347,798 gallons**
Diesel - Total	**1,954,956 gallons**

MWh = megawatt-hours; cf = cubic feet

[a] Detailed calculations are provided in Appendix B, of this Technical Report.

[b] Totals may not add up due to rounding of decimals.

[c] Solar PV generation not included in electricity totals.

SOURCE: ESA, 2022.

Electricity

Project operation will increase the demand for electricity resources including for water supply, conveyance, distribution, and treatment. The proposed project's estimated operational electricity demand, including from water demand, is provided in Table 9. As shown in Table 9, the proposed project would result in a projected consumption of electricity totaling approximately 224,665 MWh per year. Additionally, the proposed project would generate approximately 25,550 MWh or solar-generated electricity annually to power the EAF and LMS within the micro mill facility.

For the 2021 fiscal year, SCE had an annual electric sale to customers of approximately 82,048,000 MWh.[158] The proposed project represents approximately 0.3 percent of the SCE network sales for 2021. In addition, the CEC forecasts that SCE's peak demand in the project buildout year of 2025, would be approximately 26,000 MW.[159] Under peak conditions, the proposed project would consume a net increase of 251,336 MWh on an annual basis which is equivalent to a peak of 29.8 to 56.8 MW (assuming 8,760 hours or 4,380 hours per year of active electricity demand). Thus, the impacts related to electrical supply and infrastructure capacity would be less than significant.

As discussed previously, the proposed project would comply with the applicable provisions of Title 24 and the CALGreen Code in effect at the time of building permit issuance. The proposed project would be designed to include numerous energy saving features that would allow the proposed project to comply with the Title 24 standards and achieve energy savings required by state regulations. Per compliance with the CALGreen Code, new construction requires energy and water efficient fixtures and fittings, energy efficient mechanical systems, light pollution reduction, site development best practices, sub metering, water efficient landscapes, recycling, and superior weather resistance and moisture management for buildings. Therefore, with the incorporation of these features, operation of the proposed project would not result in the wasteful, inefficient, and unnecessary consumption of electricity.

Natural Gas

The proposed project would not include any natural gas infrastructure and thus would not have any building natural gas demand. Therefore, operation of the proposed project would not result in the wasteful, inefficient, and unnecessary consumption of natural gas.

Transportation Energy

The proposed project's estimated operational transportation fuel demand is provided in Table 9. As discussed previously, the proposed project would support statewide efforts to improve transportation energy efficiency and reduce transportation energy consumption with respect to private automobiles. The proposed project would encourage alternative modes of transportation.

[158] SCE, *2021 Annual Report*, February 24, 2022. https://www.edison.com/content/dam/eix/documents/investors/sec-filings-financials/2021-eix-sce-annual-report.pdf. Accessed October 2021.

[159] CEC, The California Energy Demand 2018-2030 Revised Forecast, 2018. https://efiling.energy.ca.gov/getdocument.aspx?tn=223244. Accessed October 2022.

Transportation fuels (gasoline and diesel) are produced from crude oil, which can be domestic or imported from various regions around the world. Based on current proven reserves, crude oil production would be sufficient to meet over 50 years of worldwide consumption.[160] The proposed project would comply with CAFE and SAFE standards, which would result in more efficient use of transportation fuels (lower consumption). Project-related vehicles would also comply with Pavley Standards, which are designed to reduce vehicle GHG emissions by mandating increasingly stringent emissions standards on new vehicles but would also result in fuel savings from more efficient engines in addition to compliance with CAFE standards.

The proposed project would locate a rebar plant in California which would deliver product to California and Mexico. As discussed in the traffic impact study report[161], without the proposed project bulk steel materials need to be imported from out of state (Washington, Utah, Oregon, and Arizona) into California. The proposed project location would generate a 41 percent reduction in average miles traveled by the Pacific Steel Group fleet and would reduce annual VMT by approximately 7,015,071 miles, thus reducing GHG emissions.[162] Thus, the proposed project supports a reduction in VMT over the state, in accordance with the goals of the 2022 RTP/SCS. As discussed in detail above in Section 5.1.3, the proposed project would not conflict with the 2022 RTP/SCS goals and strategies intended to reduce VMTs and meet CARB's GHG reduction goals. Therefore, the proposed project would not conflict with the actions and strategies contained in the 2022 RTP/SCS.

Based on the above, the proposed project would minimize operational transportation fuel demand in line with state, regional, and County goals. Therefore, operation of the proposed project would not result in the wasteful, inefficient, and unnecessary consumption of energy.

Impact EN-2: The project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

5.2.3 Construction

The proposed project would utilize construction contractors who must demonstrate compliance with applicable regulations. Construction equipment would be required to comply with federal, state, and regional requirements where applicable. With respect to truck fleet operators, USEPA and NHSTA have adopted fuel-efficiency standards for medium- and heavy-duty trucks that will be phased in over time. Phase 1 heavy-duty truck standards apply to combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles for model years 2014 through 2018 and result in a reduction in fuel consumption from 6 to 23 percent over the 2010 baseline, depending

[160] BP Global, *Statistical Review of World Energy 2021*, 2021. https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2021-oil.pdf. Accessed October 2022.

[161] LAC//Pinnacle Engineering, *Traffic Impact Study for Pacific Steel Group Reinforcing Bar Manufacturing Plant, Kern County, California*, October 10, 2022.

[162] LAC//Pinnacle Engineering, *Traffic Impact Study for Pacific Steel Group Reinforcing Bar Manufacturing Plant, Kern County, California*, October 10, 2022.

on the vehicle type.[163] USEPA and NHTSA also adopted the Phase 2 heavy-duty truck standards, which cover model years 2021 through 2027 and require the phase-in of a 5 to 25 percent reduction in fuel consumption over the 2017 baseline depending on the compliance year and vehicle type.[164] The energy modeling for trucks does not take into account specific fuel reductions from these regulations, since they would apply to fleets as they incorporate newer trucks meeting the regulatory standards; however, these regulations would have an overall beneficial effect on reducing fuel consumption from trucks over time as older trucks are replaced with newer models that meet the standards.

In addition, construction equipment and trucks are required to comply with CARB regulations regarding heavy-duty truck idling limits of 5 minutes per occurrence. Additionally, off-road emissions standards will increase equipment efficiencies as they are phased-in over time and less-efficient equipment is phased out of construction fleets. These limitations would result in an increase in energy savings in the form of reduced fuel consumption from more fuel-efficient engines. Although these requirements are intended to reduce criteria pollutant emissions, compliance with the anti-idling and emissions regulations would also result in the efficient use of construction-related energy. Thus, based on the information above, construction and operation of the proposed project would comply with existing energy standards.

The proposed project's construction equipment used would be consistent with the energy standards applicable to construction equipment including limiting idling fuel consumption and using contractors that comply with applicable CARB regulatory standards that affect energy efficiency. Therefore, the proposed project would comply with existing energy standards and impacts would be less than significant.

5.2.4 Operation

The proposed project would be designed in a manner that is consistent with relevant energy conservation plans designed to encourage development that results in the efficient use of energy resources. The proposed project would comply with CALGreen and Title 24 requirements to reduce energy consumption by implementing energy efficient building designs, pre-wiring residences with electric vehicle charging ports, implementing solar-ready rooftops, reducing indoor and outdoor water demand, and installing energy-efficient appliances and equipment. These measures are consistent with the County's Green Building Standards of improving energy and water efficiency in buildings, decreasing water use, and using energy efficient appliances and equipment.

With respect to operational transportation-related fuel usage, the proposed project would support statewide efforts to improve transportation energy efficiency and reduce transportation energy consumption with respect to private automobiles. The proposed project would comply with

[163] United States Environmental Protection Agency (USEPA), 2011. *Fact Sheet: EPA and NHTSA Adopt First-Ever Program to Reduce Greenhouse Gas Emissions and Improve Fuel Efficiency of Medium- and Heavy-Duty Vehicles*. https://www.nhtsa.gov/sites/nhtsa.gov/files/detailed-fact-sheet.pdf. Accessed October 2022.

[164] USEPA, Federal Register/Vol. 81, No. 206/Tuesday, Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2, October 25, 2016. https://www.gpo.gov/fdsys/pkg/FR-2016-10-25/pdf/2016-21203.pdf. Accessed October 2022.

CAFE fuel economy standards and the Pavley Standards, which are designed to result in more efficient use of transportation fuels. The proposed project would reduce overall VMTs for trucks versus not siting the project in California. The proposed project would support KCOG's 2022 RTP/SCS as discussed above.

The proposed project would comply with the CALGreen, and Title 24. Overall, the proposed project's features would support and promote the use of renewable energy through the implementation of the solar array to power the EAF and LMS and energy efficiency through compliance with CALGreen and Title 24 requirements and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Therefore, the proposed project impacts would be less than significant.

5.2.5 Cumulative Energy Impacts

Electricity

Buildout of the proposed project, related projects, and additional forecasted growth in SCE's service area would cumulatively increase the demand for electricity supplies and on infrastructure capacity. It is expected that SCE would continue to expand delivery capacity as necessary to meet demand increases within its service area. Development projects within the SCE service area would also be anticipated to incorporate site-specific infrastructure improvements, as necessary. Each cumulative project would be reviewed by SCE to identify necessary power facilities and service connections to meet individual project needs.

Related projects, as with the proposed project, would be required to evaluate electricity conservation features and compliance with applicable electricity efficiency plans and standards including the Title 24 standards and CALGreen Code, and incorporate mitigation measures, as necessary under CEQA. Related projects, as with the proposed project, would also be required to evaluate potential impacts related to conflicts with the County's General Plan, and local and regional supplies or capacity based on regional growth plans, such as the SCE energy supply projections for long-term planning.

As such, the proposed project's contribution to cumulative impacts due to conflicts with or obstruction of a state or local plan for renewable energy or energy efficiency would not be cumulatively considerable.

Natural Gas

The geographic context for the cumulative analysis of natural gas is the SoCalGas service area. Growth within this service area is anticipated to increase the demand for natural gas and the need for infrastructure, such as new or expanded facilities.

Cumulative development projects in the SoCalGas service area would result in the use of natural gas resources. However, as discussed above, the proposed project would not include any natural gas infrastructure and thus, would not have natural gas demand. As such, the proposed project would not be cumulatively considerable.

Transportation Energy

Buildout of the proposed project, related projects, and additional forecasted growth would cumulatively increase the demand for transportation-related fuel in the state and region. However, as discussed above, the proposed project would not conflict with the energy efficiency policies emphasized by the 2022 RTP/SCS. As discussed previously, the proposed project would be consistent with and not conflict with KCOG's land use type for the area and would encourage employees to use alternative modes of transportation to reduce commute trips. The 2022 RTP/SCS is a regional planning tool that addresses cumulative growth and resulting environmental effects and is applicable to the proposed project, and related projects with respect to transportation energy efficiency. Related projects would be required under CEQA to evaluate if their respective developments would conflict with the energy efficiency policies emphasized by the 2022 RTP/SCS. Furthermore, related projects would be required to implement mitigation measures, as needed, if found to be in conflict with applicable provisions of the 2022 RTP/SCS for the land use type.

Since the proposed project would not conflict with the 2022 RTP/SCS with respect to energy use, the proposed project's contribution to cumulative impacts with respect to potentially significant environmental impacts due to conflicts with or obstruction of a state or local plan for transportation energy efficiency would not be cumulatively considerable.

SECTION 6
References

Anderegg, William R. L., J.W. Prall, J. Harold, S.H., Schneider, Expert Credibility in Climate Change, Proceedings of the National Academy of Sciences of the United States of America, 2010, 107:12107-12109. https://www.pnas.org/doi/10.1073/pnas.1003187107.

Antelope Valley East Kern Water Agency, 2020 Urban Water Management Plan, May 2021 https://www.avek.org/files/2a8e325f5/AVEK+2020+UWMP_Public+Draft_210525.pdf.

Association of Environmental Professionals (AEP), *Final White Paper Beyond 2020 and Newhall: A Field Guide t New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California*, October 29, 2016. https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf.

BP Global, *Statistical Review of World Energy 2021*, 2021. https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2021-oil.pdf.

Cal-Adapt, 2022. Local Climate Change Snapshot, 860 Sopp Road, Mojave, California 93501. https://cal-adapt.org/tools/local-climate-change-snapshot/.

California Air Pollution Control Officers Association (CAPCOA), CEQA & Climate change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act, (2008).

California Air Resources Board (CARB). 2022 Scoping Plan For Achieving Carbon Neutrality, November 16. 2022 Scoping Plan Update (ca.gov).

California Air Resources Board. 2022. Final Environmental Analysis for the 2022 Scoping Plan for Achieving Carbon Neutrality. scoping plan (ca.gov).

California Air Resource Board (CARB), *California's 2017 Climate Change Scoping Plan*, November 2017. https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping_plan_2017.pdf.

California Air Resources Board (CARB), California Greenhouse Gas Emissions for 2000–2020 – by Category as Defined in the 2008 Scoping Plan, October 26, 2022.

California Air Resources Board (CARB), Draft *Greenhouse Gas Emissions of Contemporary Wildfire, Prescribed Fire, and Forest Management Activities*, December 2020. https://ww3.arb.ca.gov/cc/inventory/pubs/ca_ghg_wildfire_forestmanagement.pdf.

California Air Resources Board (CARB), Executive Order G-19-203 Kern Council of Governments 2018 Sustainable Communities Strategy CARB Acceptance of GHG Quantification Determination, July 24, 2020. https://ww2.arb.ca.gov/sites/default/files/2020-07/Kern_COG_2018_SCS_Acceptance_of_GHG_Quantification_Determination_Executive_Order.pdf.

California Air Resources Board (CARB), In-Use Off-Road Diesel-Fueled Fleets Regulation, 2022. https://ww2.arb.ca.gov/our-work/programs/use-road-diesel-fueled-fleets-regulation.

California Air Resources Board (CARB), Mobile Source Emissions Inventory, 2022. https://ww2.arb.ca.gov/our-work/programs/mobile-source-emissions-inventory.

California Air Resources Board (CARB) Regional Plan Targets, SB 375 Regional Plan Climate Targets, 2022. https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets.

California Air Resources Board (CARB), Short-Lived Climate Pollutant Reduction Strategy, March 2017. https://ww2.arb.ca.gov/sites/default/files/2020-07/final_SLCP_strategy.pdf.

California Building Standards Commission, *2010 California Green Building Standards Code*, 2010.

California Building Standards Commission, *2022 California Green Building Standard Code*, July 2022. https://www.dgs.ca.gov/BSC/CALGreen.

California Climate Change Center, 2006. *Our Changing Climate: Assessing the Risks to California*. https://www.engr.scu.edu/~emaurer/papers/CEC-500-2006-077.pdf.

California Code of Regulations, 14 CCR § 15064(h)(3).

California Department of Finance, "E-6. Population estimates and components of change by county 2010–2020," 2020, December. http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-6/.

California Department of Finance, Gross State Product, 2021, https://dof.ca.gov/Forecasting/Economics/economic-indicators/gross-state-product/.

California Department of Food and Agriculture, 2022. California Agricultural Production Statistics: 2021 Crop Year Report. September. https://www.cdfa.ca.gov/Statistics/.

California Energy Commission (CEC), *2021 Integrated Energy Policy Report Highlights*, April 5, 2022. https://efiling.energy.ca.gov/GetDocument.aspx?tn=242559.

California Energy Commission (CEC), *2022 Building Energy Efficiency Standards*, August 11, 2021. https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency.

California Energy Commission (CEC), Scenarios of Climate Change in California: An Overview, February 2006, https://www.sustainable-design.ie/arch/California2006_Climate-Change-Scenarios.pdf.

California Energy Commission (CEC), Supply and Demand of Natural Gas in California, 2022. https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california.

California Energy Commission (CEC), The California Energy Demand 2018-2030 Revised Forecast, 2018. https://efiling.energy.ca.gov/getdocument.aspx?tn=223244.

California Environmental Protection Agency, Climate Action Team, Climate Action Team Report to Governor Schwarzenegger and the Legislature, 2006. https://www.csus.edu/indiv/s/shulockn/Executive%20Fellows%20PDF%20readings/Climate%20Action%20Team%20Report.pdf.

California Gas and Electric Utilities, *2022 Supplemental California Gas Report*, p. 184, 2022. Daily natural gas usage in 2022 was 2,443 million cf, annual value derived by multiplying daily values by 365 days. https://www.socalgas.com/sites/default/files/Joint_Utility_Biennial_Comprehensive_California_Gas_Report_2022.pdf.

California Legislative Information, 2022. AB-1279 The California Climate Crisis Act. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB1279.

California Legislative Information, 2022. AB-1757 California Global Warming Solutions Act of 2006: climate goal: natural and working lands. https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220AB1757.

California Legislative Information, 2022. SB-27 Carbon sequestration: state goals: natural and working lands; registry of projects. https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220SB27.

California Legislative Information, 2022. SB-596 Greenhouse gases: cement sector: net-zero emissions strategy. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB596.

California Legislative Information, 2022. SB-905 Carbon sequestration: Carbon Capture, Removal, Utilization, and Storage Program. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB905.

California Legislative Information, 2022. SB-1137 Oil and gas: operations: local restrictions: notice of intention: health protection zone: sensitive receptors. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB1137.

California Legislative Information, 2022. SB-1206 Hydrofluorocarbon gases: sale or distribution. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB1206.

California Natural Resources Agency (CNRA), 2018. California's Fourth Climate Change Assessment, Statewide Summary Report. https://www.energy.ca.gov/sites/default/files/2019-11/Statewide_Reports-SUM-CCCA4-2018-013_Statewide_Summary_Report_ADA.pdf.

California Natural Resources Agency (CNRA) and California Energy Commission (CEC), 2018. Mean and Extreme Climate Change Impacts on the State Water Project, A Report for: California's Fourth Climate Change Assessment, August 2018. https://www.energy.ca.gov/sites/default/files/2019-12/Water_CCCA4-EXT-2018-004_ada.pdf.

California Legislative Information, 2022. SB-1020 Clean Energy, Jobs, and Affordability Act of 2022. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB1020.

California Legislative Information, 2022. SB-1075 Hydrogen: green hydrogen: emissions of greenhouse gases. https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220SB1075.

California Legislative Information, Assembly Bill No. 341, February 10, 2011. http://www.leginfo.ca.gov/pub/11-12/bill/asm/ab_0301-0350/ab_341_bill_20111006_chaptered.html.

California Public Utilities Commission. California Renewables Portfolio Standard (RPS). https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/electric-power-procurement/rps.

Cynthia Bryant, Letter from Director of the Office of Planning and Research to Mike Chrisman, Secretary for Natural Resources, dated April 13, 2009.

E3, Achieving Carbon Neutrality in California, PATHWAYS Scenarios Developed for the California Air Resources Board, October 2020, https://ww2.arb.ca.gov/sites/default/files/2020-10/e3_cn_final_report_oct2020_0.pdf.

Eastern Kern Air Pollution Control District (EKAPCD), *Addendum to CEQA Guidelines Addressing GHG Emission Impacts for Stationary Source Projects When Serving As Lead CEQA Agency*, March 8, 2012. http://www.kernair.org/Documents/CEQA/EKAPCD%20CEQA%20GHG%20Policy%20Adopted%203-8-12.pdf.

Edison International. Edison International and Southern California Edison 2021 Financial and Statistical Report. https://www.edison.com/content/dam/eix/documents/investors/sec-filings-financials/2021-financial-statistical-report.pdf.

Federal Register, 2022. *California State Motor Vehicle Pollution Control Standards; Advanced Clean Car Program; Reconsideration of a Previous Withdrawal of a Waiver of Preemption; Notice of Decision*. Federal Register / Vol. 87, No. 49 / Monday, March 14, 2022 / Notices. Available: https://www.federalregister.gov/documents/2022/03/14/2022-05227/california-state-motor-vehicle-pollution-control-standards-advanced-clean-car-program.

Federal Register, 2021. *Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards, Final Rule*. Federal Register / Vol. 86, No. 248/ Thursday, December 30, 2021 / Rules and Regulations. Available: https://www.govinfo.gov/content/pkg/FR-2021-12-30/pdf/2021-27854.pdf.

Greenhouse Gas Protocol, Required Greenhouse Gases in Inventories. February 2013. Available at: https://www.ghgprotocol.org/sites/default/files/ghgp/NF3-Amendment_052213.pdf.

Intergovernmental Panel on Climate Change (IPCC), Climate Change 2014: Synthesis Report, Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, Summary for Policy Makers, 2014, page 5, https://www.ipcc.ch/site/assets/uploads/2018/02/AR5_SYR_FINAL_SPM.pdf.

Intergovernmental Panel on Climate Change (IPCC), Fourth Assessment Report (AR4), Working Group I Report: The Physical Science Basis, Table 2.14, 2007, https://www.ipcc.ch/site/assets/uploads/2018/02/ar4-wg1-chapter2-1.pdf.

Intergovernmental Panel on Climate Change (IPCC), Second Assessment Report, Working Group I: The Science of Climate Change, 1995, https://www.ipcc.ch/site/assets/uploads/2018/05/2nd-assessment-en-1.pdf.

Kern County, Draft Environmental Impact Report, Aratina Solar Project, May 2021.

Kern Council of Governments, 2018 Regional Transportation Plan and Sustainable Communities Strategy, August 16, 2018. https://www.kerncog.org/wp-content/uploads/2018/10/2018_RTP.pdf.

Kern Council of Governments, 2022 Regional Transportation Plan and Sustainable Communities Strategy, July 21, 2022. https://www.kerncog.org/category/docs/rtp/.

Kern County Planning Department, Kern County General Plan, September 22, 2009. https://psbweb.co.kern.ca.us/planning/pdfs/kcgp/KCGP_Complete.pdf.

LAV//Pinnacle Engineering, *Traffic Impact Study for Pacific Steel Group Reinforcing Bar Manufacturing Plant*, October 10, 2022.

National Highway Traffic Safety Administration (NHTSA), The Safer Affordable Fuel-Efficient 'SAFE' Vehicles Rule, 2020. https://www.govinfo.gov/content/pkg/FR-2020-04-30/pdf/2020-06967.pdf.

National Highway Traffic Safety Administration (NHTSA) and USEPA, Federal Register / Vol. 83, No. 165 / Friday, August 24, 2018 / Proposed Rules, The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks, 2018. https://www.gpo.gov/fdsys/pkg/FR-2018-08-24/pdf/2018-16820.pdf.

Office of Environmental Health Hazard Assessment (OEHHA), 2018. *Indicators of Climate Change in California*. May 2018. https://oehha.ca.gov/media/downloads/climate-change/report/2018caindicatorsreportmay2018.pdf.

Office of the Governor Edmund G. Brown Jr., Governor Brown Establishes Most Ambitious Greenhouse Gas Reduction Target in North America, April 29, 2015. https://www.ca.gov/archive/gov39/wp-content/uploads/2018/09/9.10.18-Executive-Order.pdf.

Pacific Institute for Studies in Development, Environment and Security (PISDES), 2003. Climate Change and California Water Resources: A Survey and Summary of the Literature. July 2003. https://pacinst.org/wp-content/uploads/2003/07/climate_change_and_california_water_resources.pdf.

PBL Netherlands Environmental Assessment Agency and the European Commission Joint Research Center, Trends in Global CO_2 and Total Greenhouse Gas Emissions 2021 Report, August 2022. PBL report template.

Southern California Edison (SCE), 2021 Sustainability Report, 2022. https://www.edison.com/content/dam/eix/documents/sustainability/eix-2021-sustainability-report-scorecard.pdf.

Southern California Edison (SCE), Who We Are. Available at: https://www.sce.com/about-us/who-we-are.

Southern California Edison (SCE), *2021 Annual Report*, February 24, 2022. https://www.edison.com/content/dam/eix/documents/investors/sec-filings-financials/2021-eix-sce-annual-report.pdf. Accessed October 2021.

State of California Executive Department, Executive Order B-55-18 to Achieve Carbon Neutrality. https://ww2.arb.ca.gov/sites/default/files/2020-10/e3_cn_final_report_oct2020_0.pdf.

State of California Executive Department, September 23, 2020. Executive Order N-79-20. https://www.gov.ca.gov/wp-content/uploads/2020/09/9.23.20-EO-N-79-20-Climate.pdf.

United States District Court for the District Court of Columbia, *State of California vs. Chao*, Case 1:19-cv-02826, 2019. https://www.courtlistener.com/docket/16223795/state-of-california-v-chao/.

United States District Court for the District Court of Columbia, *Union of Concerned Scientists, et al., Petitioners v. National Highway Traffic Safety Administration, Respondent*, USCA Case #19-1230, 2021. http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/case-documents/2021/20210208_docket-19-1230_order.pdf.

United States Energy Information Administration, California State Energy Profile, March 17, 2022. https://www.eia.gov/state/print.php?sid=CA.

United States Energy Information Administration. California State Profile and Energy Estimates, Consumption by Sector, 2020. https://www.eia.gov/state/?sid=CA#tabs-2.

United States Environmental Protection Agency (USEPA), 2011. *Fact Sheet: EPA and NHTSA Adopt First-Ever Program to Reduce Greenhouse Gas Emissions and Improve Fuel Efficiency of Medium- and Heavy-Duty Vehicles*. https://www.nhtsa.gov/sites/nhtsa.gov/files/detailed-fact-sheet.pdf.

United States Environmental Protection Agency, 2011. PSD and Title V Permitting Guidance for Greenhouse Gases, March. https://www.epa.gov/sites/default/files/2015-12/documents/ghgpermittingguidance.pdf. Accessed January 2023.

United States Environmental Protection Agency (USEPA). 2020. Greenhouse Gas Reporting Program. Accessed at https://www.epa.gov/ghgreporting, August 2020.

United States Environmental Protection Agency and National Highway Traffic Safety Administration, USEPA and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017–2025 Cars and Light Trucks, August 2012. https://nepis.epa.gov/Exe/ZyPDF.cgi/P100EZ7C.PDF?Dockey=P100EZ7C.PDF.

United States Environmental Protection Agency (USEPA), 2021. Federal Register/ Vol. 86, No. 248, Thursday, December 30, 2021. Revised 2023 and Later Model Year Light Duty Vehicle Greenhouse Gas Emissions Standards. Available: https://www.federalregister.gov/documents/2021/12/30/2021-27854/revised-2023-and-later-model-year-light-duty-vehicle-greenhouse-gas-emissions-standards.

United States Environmental Protection Agency (USEPA), *Federal Register*, Vol. 84, No. 188, Rules and Regulations, Sections 51310–51363, Friday, September 27, 2019. https://www.govinfo.gov/content/pkg/FR-2019-09-27/pdf/2019-20672.pdf.

United States Environmental Protection Agency (USEPA), Federal Register/Vol. 81, No. 206/Tuesday, Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2, October 25, 2016. https://www.gpo.gov/fdsys/pkg/FR-2016-10-25/pdf/2016-21203.pdf.

White House Briefing Room, 2021. Fact Sheet: President Biden Announces Steps to Drive American Leadership Forward on Clean Cars and Trucks, August 5. Available: https://www.whitehouse.gov/briefing-room/statements-releases/2021/08/05/fact-sheet-president-biden-announces-steps-to-drive-american-leadership-forward-on-clean-cars-and-trucks/.

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Appendix A

GHG Calculations and Output Files

GHG Emissions Summary

Source	MTCO2e/yr
Micro Mill Electricity	44,200
Ancillary Buildings	209
On-Road Transportation	16,530
Manufacturing	109,440
Water Treatment Plant	376
Emergency Generators	72
Offroad Mobile Equipment	3,122
Fuel Tanks	533
Solar Array	(4,552)
Operational Subtotal	**169,974**
Construction	40,341
Amortized Construction	1,345
Project Total	**171,319**

GHG Construction Emissions Summary

Source	Emissions (MTCO2e/yr)
Offroad Equipment	33,287
Mobile Sources	5,288
Total	**38,575**

Emissions by Year	Emissions (MTCO2e/yr)		
	Offroad Equipment	Mobile Sources	Total
Mill Construction			
2023	9,240	1,763	11,003
2024	21,636	3,202	24,838
2025	2,269	240	2,509
Mill Construction Subtotal	*33,144*	*5,205*	*38,349*
Off-Site Improvements			
Traffic Improvement Project 1 – 2025	29	6	34
Traffic Improvement Project 2 – 2041	32	4	37
Traffic Improvement Project 3 – 2025	9	24	33
Traffic Improvement Project 4 – 2041	18	48	66
Water Line Project – 2025	55	2	57
Combined Total	**33,287**	**5,288**	**38,575**
Amortized Total			**1,286**

Summary of Mojave Micro Mill Operational GHG Emissions

Tons of Material	Emissions (MTCO2e/yr)			
	Transportation	Electricity	Manufacturing	Total
456,000	16,530	44,200	109,440	170,170

Tons of Material	Electricity	
	MWh/yr	MTCO2e/yr
456,000	248,064	44,200

Notes:

- Tons of material from MojaveMicroMill_OpsEmissionCalcs.xlsx

Mojave Micro mill
Project Operational Energy Demand
Air Quality and Greenhouse Gas Assessment

Emergency Generator Emissions

updated: 12/14/2022

Conversion Factors

HP/kW	1.3410	
PM10 Fraction of Total PM	0.960	Table A - Updated CEIDARS Table with PM2.5 Fractions, INTERNAL COMBUSTION - DISTILLATE AND DIESEL-ELECTRIC GENERATION
PM2.5 Fraction of Total PM	0.937	Table A - Updated CEIDARS Table with PM2.5 Fractions, INTERNAL COMBUSTION - DISTILLATE AND DIESEL-ELECTRIC GENERATION
CO2 g/gal	10.21	Climate Registry, Table 13.1: https://www.theclimateregistry.org/wp-content/uploads/2014/11/2016-Climate-Registry-Default-Emission-Factors.pdf
CH4 g/gal	0.58	Climate Registry, Table 13.7: https://www.theclimateregistry.org/wp-content/uploads/2014/11/2016-Climate-Registry-Default-Emission-Factors.pdf
N2O g/gal	0.26	Climate Registry, Table 13.7: https://www.theclimateregistry.org/wp-content/uploads/2014/11/2016-Climate-Registry-Default-Emission-Factors.pdf
GWP CH4	25	IPCC AR4
GWP N2O	298	IPCC AR4
CO2e g/gal	10,302	Diesel
CO2 g/gal	10,210	Diesel
CO2/CO2e	0.9911	Diesel
lbs CO2/hp-hr	0.9460	Natural Gas Emergency Generator, https://www.epa.gov/sites/default/files/2016-09/boilers_and_emergency_engines_pte_calculator_version_1.0.xlsx

Emergency Generator - Natural Gas

Ratings:	-	kW	*(based on engineering assumptions)*
	1,800	HP	*(based on engineering assumptions; conversion from kW to hp)*
		kW	*(based on engineering assumptions)*
	-	HP	*(conversion from kW to hp)*
Load Factor:	0.74		*(based on CalEEMod Generator Set Load Factor)*
Engine Emissions Tier:	Rule 1470 Compliant		*(compliance with CARB and AQMD diesel regulations)*
Operating Hours per Unit:	2	hours/day	*(testing/maintenance)*
	100	hours/year	*(testing/maintenance, Regulatory Limit per SCAQMD Rule 1470)*

Emergency Generator - Natural Gas

Ratings:	-	kW	*(based on engineering assumptions)*
	150	HP	*(based on engineering assumptions; conversion from kW to hp)*
		kW	*(based on engineering assumptions)*
		HP	*(conversion from kW to hp)*
Load Factor:	0.74		*(based on CalEEMod Generator Set Load Factor)*
Engine Emissions Tier:	Rule 1470 Compliant		*(compliance with CARB and AQMD diesel regulations)*
Operating Hours per Unit:	2	hours/day	*(testing/maintenance)*
	100	hours/year	*(testing/maintenance, Regulatory Limit per SCAQMD Rule 1470)*

Emergency Generator - Diesel

Ratings:	-	kW	*(based on engineering assumptions)*
	250	HP	*(based on engineering assumptions; conversion from kW to hp)*
		kW	*(based on engineering assumptions)*
		HP	*(conversion from kW to hp)*
Load Factor:	0.74		*(based on CalEEMod Generator Set Load Factor)*
Engine Emissions Tier:	Rule 1470 Compliant		*(compliance with CARB and AQMD diesel regulations)*
Operating Hours per Unit:	2	hours/day	*(testing/maintenance)*
	100	hours/year	*(testing/maintenance, Regulatory Limit per SCAQMD Rule 1470)*

Emergency Generator - Natural Gas

Units	Greenhouse Gases [1]	
	CO_2	CO_2e
hp-hr/day	2664.00	
hp-hr/yr	133,200.00	
lbs/day	2,520.14	2,542.85
lbs/yr	126,007.20	127,142.38
tons/yr	63.00	63.57
metric tons/yr	**57.16**	**57.67**

Fuel Consumption (mmcf)
1,058,268

Emergency Generator - Natural Gas

Units	Greenhouse Gases [1]	
	CO_2	CO_2e
hp-hr/day	222.00	224.00
hp-hr/yr	11100.00	11,200.00
lbs/day	210.01	211.90
lbs/yr	10,500.60	10,595.20
tons/yr	5.25	5.30
metric tons/yr	**4.76**	**4.81**

Fuel Consumption (mmcf)
88,189

Emergency Generator - Diesel

Units	Greenhouse Gases [1]	
	CO_2	CO_2e
g/kW-hr	—	—
g/HP-hr	526.17	530.91
lbs/hr	214.60	216.53
lbs/day	429.20	433.07
lbs/yr	21,460.00	21,653.33
tons/yr	10.73	10.83
metric tons/yr	**9.73**	**9.82**

Fuel Consumption (gal)
959

Total Emergency Generator Emissions

Units	Greenhouse Gases [1]	
	CO_2	CO_2e
lbs/hr	13978.60	11416.53
lbs/day	3159.36	3187.82
lbs/yr	157967.80	159390.90
tons/yr	78.98	79.70
metric tons/yr	**71.65**	**72.30**

Fuel Consumption	
Diesel (gal)	959
Natural Gas (mmcf)	1,146,457

Notes:

1. Emission factor for CO2: U.S. Environmental Protection Agency, AP-42 Compilation of Air Pollutant Emission Factors, Fifth Edition, Section 3.4, Table 3.4-1.
   Emissions of GHGs assume 99.11% of the CO2e emissions occur as CO2, which is typical for off-road diesel engines.

Mojave Micro Mill
Solar Array
Greenhouse Gas Analysis

		GHG Savings (lbs/yr)				
Source	**Electricity Generation (MWh)**	**CO2**	**CH4**	**N20**	**CO2e**	**MTCO2e (MT/yr)**
Solar Array	25,550.0	-9,984,940	-843	-102	-10,036,474	-4,552

GHG	Intensity factor (lbs/MWh)
CO2	390.80
CH4	0.033
N2O	0.004

Mojave Micro Mill
Water Treatment Plant
Greenhouse Gas Analysis

497 Acre-feet/year
161,947,947 gal/year
162 mgal/year

CalEEMod Water Electricity Factors	Electricity Intensity Factor To Supply (kWh/Mgal)	Electricity Intensity Factor To Treat (kWh/Mgal)	Electricity Intensity Factor To Distribute (kWh/Mgal)	Electricity Intensity Factor For Wastewater Treatment (kWh/Mgal)
	9727	111	1272	1911

		GHG Emissions (lbs/yr)				
Source	**Electricity Demand from Water Demand (MWh)**	**CO2**	**CH4**	**N20**	**CO2e**	**MTCO2e (MT/yr)**
Water Treatment Plant	2,108.7	824,089	70	8	828,343	376

GHG	Intensity factor (lbs/MWh)
CO2	390.80
CH4	0.033
N2O	0.004

Mojave Micro Mill
Construction Energy Analysis

Off-Road Equipment

Equipment ≤ 100 hp		
pounds diesel fuel/hp-hr (lb/hp-hr):[1]	0.408	lb/hp-hr
diesel density (lb/gal):[1]	7.11	lb/gal
diesel gallons/hp-hr:	0.0574	gal/hp-hr
<100 hp	12,950	hp-hr
Total diesel gallons:	743	gal
Equipment > 100 hp		
pounds diesel fuel/hp-hr (lb/hp-hr):[1]	0.367	lb/hp-hr
diesel density (lb/gal):[1]	7.11	lb/gal
diesel gallons/hp-hr:	0.0516	gal/hp-hr
>100 hp	5,832,160	hp-hr
Total diesel gallons:	301,088	gal
Total diesel gallons (off-road equipment):	**301,831**	**gal**

Fuel Type	Unit	Amount	MTCO2e
Diesel	gal	301,831	3,091
Electricity	kWh	173,003	31
Propane	gal	13	0.1
Total			**3,122**

Equipment	Shifts/Day	Hours/Day	HP	Load	Days	Total hp-hr/yr	Fuel Use (gal)	Fuel Type	Electricity (kWh/yr)	Propane (gallons/yr)	Emissions (MTCO2e)
Scrap Yard Crane Grab	3	8	270	0.29	350	657,720	33,955	Diesel	-	-	348
Scrap Yard Crane Mag	2	8	270	0.29	350	438,480	22,637	Diesel	-	-	232
Scrap Yard Crane Mag	1	8	270	0.29	350	219,240	11,318	Diesel	-	-	116
Slag Yard Crane Mag	1	8	270	0.29	250	156,600	8,085	Diesel	-	-	83
Cat 972 - Hot	3	8	340	0.36	350	1,028,160	53,079	Diesel	-	-	544
Cat 972 - Cold Slag	1	8	340	0.37	250	251,600	12,989	Diesel	-	-	133
Cat 972 - Cold Slag	1	8	340	0.37	250	251,600	12,989	Diesel	-	-	133
Cat 972 - Cold Scrap	1	8	340	0.37	350	352,240	18,185	Diesel	-	-	186
Pallet Carrier	3	8	300	0.4	350	1,008,000	52,038	Diesel	-	-	533
Pallet Carrier	2	8	300	0.4	350	672,000	34,692	Diesel	-	-	355
Breaking Crane	1	8	400	0.29	250	-	-	Electric	173,003	-	31
Refractory tear out	1	4	200	0.34	250	68,000	3,511	Diesel	-	-	36
Water Truck	2	8	240	0.38	350	510,720	26,366	Diesel	-	-	270
Skid Steer	1	2	70	0.37	250	12,950	743	Diesel	-	-	8
Telehandler	1	2	160	0.4	250	32,000	1,652	Diesel	-	-	17
Maintenance Truck	1	4	240	0.38	250	91,200	4,708	Diesel	-	-	48
Lube Truck	1	4	200	0.38	250	76,000	3,924	Diesel	-	-	40
Fork Truck	1	2	40	0.2	250	-	-	Propane	-	13	0
Man Lift	1	2	120	0.31	250	18,600	960	Diesel	-	-	10
					>100 hp	**5,832,160**	**301,088**				
					<100 hp	**12,950**	**743**				
Total						**5,845,110**	**301,831**		**173,003**	**13**	**3,122**

Pacific Steel

Mojave Micro Mill Project

Mojave, CA

Assumptions

Two diesel tanks

5000 gallons total

Process Description

1. 1,000-gallon gasoline storage tank and a 3,000-gallon diesel fuel tank
2. Tank breathing and working losses

Emissions Calculation Methodology

Diesel Tank: n_FE01

Run Tanks 4.0.9d

Gasoline Tank: n_FE02

Run Tanks 4.0.9d

Emissions Calculation Inputs

n_FE01

Shell Length	L	20	ft
Diameter	D	5	ft
Tank Size	V	1000	gal
Tank Throughput	v	52000	gal/yr
Vaccum Setting	P_-	-0.03	psig
Pressure Setting	P_+	0.03	psig

Emissions Calculation

Source	Fuel Use		
n_FE01	533	MTCO2e/yr	*from Tanks reports*
Total	**533**	**MTCO2e/yr**	

Transportation				
Transit Mode	**Transport of Scrap, Billet, and Finished Product (MT GHG/Ton of Material)**			
	CO2	**CH4**	**N2O**	**CO2e**
Truck	0.036	0.00000035	0.00000081	0.036
Ship	-	-	-	0.037

Source: Ramboll, Comparison of Greenhouse Gas Emissions from Rebar Manufacturing Mills Draft Memo, Attachment 1, Table 1

GHG	**GWP**
CO2	1
CH4	25
N2O	298

Source: IPCC, AR4

Electricity	**Emission Factor**			
	CO2	**CH4**	**N2O**	**CO2e**
lbs CO2e/MWh	390.8	0.033	0.004	392.817
MWh/Ton of Material	-	-	-	0.544
MT/Ton of Material	0.12	0.0000084	0.000001	0.121

Source: Ramboll, Comparison of Greenhouse Gas Emissions from Rebar Manufacturing Mills Draft Memo, Attachment 1, Table 2

Fuel Type	**Unit**	**Emission Factor**					
		CO2 (kg/fuel unit)	**CH4 (g/fuel unit)**	**N2O (g/fuel unit)**	**CO2e (kg/fuel unit)**	**CO2e (MT/fuel unit)**	
Diesel	gallon	10.15	0.58	0.26	10.24	0.01024198	Source: https://ghgprotocol.org/sites/default/files/Emission_Factors_from_Cross_Sector_Tools_March_2017.xlsx
Gasoline	gallon	8.81	0.5	0.22	8.89	0.00888806	Source: https://ghgprotocol.org/sites/default/files/Emission_Factors_from_Cross_Sector_Tools_March_2017.xlsx
Natural Gas	scf	0.05444	0.00103	0.0001	0.0545	5.44956E-05	Source: https://ghgprotocol.org/sites/default/files/Emission_Factors_from_Cross_Sector_Tools_March_2017.xlsx
Propane	gallon	5.68	0.5	0.22	5.7581	0.00575806	Source: https://www.epa.gov/sites/default/files/2015-07/documents/emission-factors_2014.pdf

Manufacturing	**CO2e Direct Emissions (MT/Ton of Material)**
	0.24

Source: Ramboll, Comparison of Greenhouse Gas Emissions from Rebar Manufacturing Mills Draft Memo, Attachment 1, Table 3

Conversions	
lbs/MT	2,204.62
kg/MT	1,000.00
g/kg	1,000.00
gal/m^3	264.17
hr/day	24
day/yr	365
gal/AF	325,851
gal/mgal	1,000,000
kW/hp	0.75
Gallons/Tank LPG	8
kWh/MWh	1,000

https://www.tmhnc.com/blog/how-long-can-a-forklift-run-on-one-tank-of-propane-lpg#:~:text=About%2090%25%20of%20forklifts%20use,fuel%20efficiency%2C%20just%20like%20cars.

APPENDIX B

Energy Calculations

Mojave Micro Mill
Construction Energy Analysis

Annual Fuel Summary

	Heavy-Duty Construction Equipment
3,380,569	Total Project Consumption
1,690,285	Annual Consumption
	Haul Trucks
91,151	Total Project Consumption
45,576	Annual Consumption
	Vendor Trucks
397,443	Total Project Consumption
198,722	Annual Consumption
	Workers
472,179	Total Project Consumption
236,090	Annual Consumption
488,595	Project Consumption of diesel for Haul Trucks and Vendors
244,297	Annual Consumption
3,869,164	Total Gallons Diesel
472,179	Total Gallons Gasoline

2.00 Estimated Project Construction Duration (years)

1,934,582 Annual Average Gallons Diesel
236,090 Annual Average Gallons Gasoline

Kern County			**Percent of Annual Project Compared to Los Angeles County**
Source	**Fuel Type**	**Gallons**	
Workers	Gasoline	406,000,000	0.0582%
Off-Road/Vendor/Haul Trucks	Diesel	272,365,805	0.7103%

Notes:

1 Gasoline and diesel amounts from CEC, 2019. Available: https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting

Annual Electricity Summary

Temporary Construction Trailer	25,980	kWh/year
Electric Off-Road Equipment	1,021,967	kWh/year
Water Conveyance for Dust Control	146,358	kWh/year
Total	**1,194,305**	**kWh/year**

82,048,000 Total SCE, 2021
0.0015% Project percentage of SCE

Source: https://s3.amazonaws.com/cms.ipressroom.com/405/files/202210/2021-eix-sce-annual

Mojave Micro Mill
Construction Energy
Construction Water Energy Estimates

Source	Annual Construction Water Use (mgal)	Total Construction Water Use (Mgal)	Electricity Demand from Water Conveyance (MWh)	Annual Electricity Demand from Water Conveyance (MWh)
Micro Mill, Ancillary Buildings, and Additional Site Components	10.21374	20.427	266.0	133.0
SCE Transmission and Telecommunication Lines	1.8	3.600	46.9	23.4
Solar Array	1.02643	2.053	26.7	13.4
				169.8

CalEEMod Water Electricity Factors	Electricity Intensity Factor To Supply (kWh/Mgal)	Electricity Intensity Factor To Treat (kWh/Mgal)	Electricity Intensity Factor To Distribute (kWh/Mgal)	Electricity Intensity Factor For Wastewater Treatment (kWh/Mgal)
	9727	111	1272	1911

Sources and Assumptions:

-Annual and total water usage taken from the Mojave Micro Mill Water Supply Assessment, page 5-6, Table 5-5.

-Electricity Intensity Factors - California Emissions Estimator Model (CalEEMod).

-SCE Transmission and Telecommunication Line construction water use based on 1 acre per day (each for transmission and telecommunications project sites) for 300 construction days.

-Estimated construction water use assumed to be generally equivalent to landscape irrigation, based on a factor of 20.94 gallons per year per square foot of landscaped area within the Los Angeles area (Mediterranean climate), which assumes high water demand landscaping materials and an irrigation system efficiency of 85%. Factor is therefore (20.94 GAL/SF/year) x (43,560 SF/acre) / (365 days/year) / (0.85) = 2,940 gallons/acre/day, rounded up to 3,000 gallons/acre/day. (U.S. Department of Energy, Energy Efficiency & Renewable Energy, Federal Energy Management Program. “Guidelines for Estimating Unmetered Landscaping Water Use." July 2010. Page 12, Table 4 - Annual Irrigation Factor – Landscaped Areas with High Water Requirements).

Mojave Micro Mill
Construction Energy Analysis

Temporary Construction Trailer - Electricity			
Land Use	**Square Feet**	**Energy Use per year (kWh)**	**Total Energy Use (kWh)**
General Office	2,000	25,980	51,960.00
Note: CalEEMod 2016.3.2 used to estimate energy use for temporary construction office			

Mojave Micro Mill
Construction Energy Analysis
Off-Road Equipment

Equipment ≤ 100 hp

pounds diesel fuel/hp-hr (lb/hp-hr):[1]	0.408	lb/hp-hr
diesel density (lb/gal):[1]	7.11	lb/gal
diesel gallons/hp-hr:	0.0574	gal/hp-hr
<100 hp	1,055,789	hp-hr
Total diesel gallons:	60,595	gal

Equipment > 100 hp

pounds diesel fuel/hp-hr (lb/hp-hr):[1]	0.367	lb/hp-hr
diesel density (lb/gal):[1]	7.11	lb/gal
diesel gallons/hp-hr:	0.0516	gal/hp-hr
>100 hp	64,308,900	hp-hr
Total diesel gallons:	3,319,974	gal

Total diesel gallons (off-road equipment): 3,380,569 gal

1. OFFROAD2017 Emission Factor Documentation

Site	Construction Phase	Equipment	Number	Hours/Day	HP	Load	Days	Total hp-hr	Electric Equipment	Electric Conversion (kW/HP)	Electric Demand (kWh)
Micro Mill	Site Preparation	Crushing/Proc. Equipment	1	7.8	250	0.78	78	118,638		-	-
Micro Mill	Site Preparation	Dumpers/Tenders	3	11.4	250	0.38	78	253,422		-	-
Micro Mill	Site Preparation	Excavators	3	11.4	500	0.38	78	506,844		-	-
Micro Mill	Site Preparation	Graders	2	12	500	0.41	78	383,760		-	-
Micro Mill	Site Preparation	Rubber Tired Loaders	2	9	300	0.36	78	151,632		-	-
Micro Mill	Site Preparation	Scrapers	2	10.2	500	0.48	78	381,888		-	-
Micro Mill	Site Preparation	Signal Boards	3	12	6	0.82	78	13,815		-	-
Micro Mill	Site Preparation	Skid Steer Loaders	2	7.8	200	0.37	78	90,043		-	-
Micro Mill	Site Preparation	Sweepers/Scrubbers	2	6	200	0.46	78	86,112		-	-
Micro Mill	Grading/Excavation	Air Compressors	3	6	275	0.48	105	249,480		-	-
Micro Mill	Grading/Excavation	Bore/Drill Rigs	2	3	100	0.5	105	31,500		-	-
Micro Mill	Grading/Excavation	Concrete/Industrial Saws	2	3	20	0.73	105	9,198		-	-
Micro Mill	Grading/Excavation	Cranes	2	10.2	500	0.29	105	310,590		-	-
Micro Mill	Grading/Excavation	Excavators	5	11.4	500	0.38	105	1,137,150		-	-
Micro Mill	Grading/Excavation	Generator Sets	4	6	450	0.74	105	839,160		-	-
Micro Mill	Grading/Excavation	Off-Highway Tractors	4	9	750	0.44	105	1,247,400		-	-
Micro Mill	Grading/Excavation	Off-Highway Trucks	4	9	750	0.38	105	1,077,300		-	-
Micro Mill	Grading/Excavation	Other Construction Equipment	1	3	20	0.42	105	2,646		-	-
Micro Mill	Grading/Excavation	Plate Compactors	1	9	50	0.43	105	20,318		-	-
Micro Mill	Grading/Excavation	Pumps	1	3	100	0.74	105	-	Electric	0.745701	17,382
Micro Mill	Grading/Excavation	Rollers	1	6	250	0.38	105	59,850		-	-
Micro Mill	Grading/Excavation	Rough Terrain Forklifts	2	12	250	0.4	105	252,000		-	-
Micro Mill	Grading/Excavation	Skid Steer Loaders	2	6	200	0.37	105	93,240		-	-
Micro Mill	Grading/Excavation	Sweepers/Scrubbers	2	6	200	0.46	105	115,920		-	-
Micro Mill	Grading/Excavation	Tractors/Loaders/Backhoes	1	9	80	0.37	105	27,972		-	-
Micro Mill	Grading/Excavation	Welders	4	6	50	0.45	105	-	Electric	0.745701	42,281
Micro Mill	Drainage/Utilities/Trenching	Dumpers/Tenders	2	12	250	0.38	131	298,680		-	-
Micro Mill	Drainage/Utilities/Trenching	Excavators	1	12	500	0.38	131	298,680		-	-
Micro Mill	Drainage/Utilities/Trenching	Generator Sets	2	6	450	0.74	131	523,476		-	-
Micro Mill	Drainage/Utilities/Trenching	Pumps	4	6	100	0.74	131	-	Electric	0.745701	173,492
Micro Mill	Drainage/Utilities/Trenching	Skid Steer Loaders	2	12	200	0.37	131	232,656		-	-
Micro Mill	Drainage/Utilities/Trenching	Tractors/Loaders/Backhoes	2	12	80	0.37	131	93,062		-	-
Micro Mill	Drainage/Utilities/Trenching	Trenchers	4	9	250	0.5	131	589,500		-	-
Micro Mill	Drainage/Utilities/Trenching	Welders	2	12	50	0.45	131	-	Electric	0.745701	52,751
Micro Mill	Electrical Installation	Cranes	2	3	500	0.29	548	476,760		-	-
Micro Mill	Electrical Installation	Dumpers/Tenders	2	6	250	0.38	548	624,720		-	-
Micro Mill	Electrical Installation	Forklifts	4	9	200	0.2	548	789,120		-	-
Micro Mill	Electrical Installation	Generator Sets	4	12	450	0.74	548	8,759,232		-	-
Micro Mill	Electrical Installation	Pumps	2	6	100	0.74	548	-	Electric	0.745701	362,876
Micro Mill	Electrical Installation	Rough Terrain Forklifts	2	9	250	0.4	548	986,400		-	-
Micro Mill	Electrical Installation	Skid Steer Loaders	2	6	200	0.37	548	486,624		-	-
Micro Mill	Electrical Installation	Tractors/Loaders/Backhoes	2	9	80	0.37	548	291,974		-	-
Micro Mill	Electrical Installation	Trenchers	2	11.4	250	0.5	548	1,561,800		-	-
Micro Mill	Electrical Installation	Welders	4	9	50	0.45	548	-	Electric	0.745701	331,002
Micro Mill	Foundations/Concrete Pour	Air Compressors	3	6	275	0.48	339	805,464		-	-
Micro Mill	Foundations/Concrete Pour	Bore/Drill Rigs	2	3	100	0.5	339	101,700		-	-
Micro Mill	Foundations/Concrete Pour	Concrete/Industrial Saws	2	3	20	0.73	339	29,696		-	-
Micro Mill	Foundations/Concrete Pour	Cranes	2	10.2	500	0.29	339	1,002,762		-	-
Micro Mill	Foundations/Concrete Pour	Excavators	5	11.4	500	0.38	339	3,671,370		-	-
Micro Mill	Foundations/Concrete Pour	Generator Sets	4	6	450	0.74	339	2,709,288		-	-
Micro Mill	Foundations/Concrete Pour	Off-Highway Tractors	4	9	750	0.44	339	4,027,320		-	-
Micro Mill	Foundations/Concrete Pour	Off-Highway Trucks	4	9	750	0.38	339	3,478,140		-	-
Micro Mill	Foundations/Concrete Pour	Other Construction Equipment	1	3	20	0.42	339	8,543		-	-
Micro Mill	Foundations/Concrete Pour	Plate Compactors	1	9	50	0.43	339	65,597		-	-
Micro Mill	Foundations/Concrete Pour	Pumps	1	3	100	0.74	339	-	Electric	0.745701	56,120
Micro Mill	Foundations/Concrete Pour	Rollers	1	6	250	0.38	339	193,230		-	-
Micro Mill	Foundations/Concrete Pour	Rough Terrain Forklifts	2	12	250	0.4	339	813,600		-	-
Micro Mill	Foundations/Concrete Pour	Skid Steer Loaders	2	6	200	0.37	339	301,032		-	-
Micro Mill	Foundations/Concrete Pour	Sweepers/Scrubbers	2	6	200	0.46	339	374,256		-	-
Micro Mill	Foundations/Concrete Pour	Tractors/Loaders/Backhoes	1	9	80	0.37	339	90,310		-	-
Micro Mill	Foundations/Concrete Pour	Welders	4	6	50	0.45	339	-	Electric	0.745701	136,508
Micro Mill	Building Erection	Air Compressors	4	10.2	275	0.48	209	1,125,590		-	-
Micro Mill	Building Erection	Cranes	4	7.8	500	0.29	209	945,516		-	-
Micro Mill	Building Erection	Dumpers/Tenders	2	6	250	0.38	209	238,260		-	-
Micro Mill	Building Erection	Forklifts	4	6	200	0.2	209	200,640		-	-
Micro Mill	Building Erection	Generator Sets	4	9	450	0.74	209	2,505,492		-	-
Micro Mill	Building Erection	Off-Highway Tractors	2	6	750	0.44	209	827,640		-	-
Micro Mill	Building Erection	Off-Highway Trucks	2	6	750	0.38	209	714,780		-	-
Micro Mill	Building Erection	Rough Terrain Forklifts	3	12	250	0.4	209	752,400		-	-
Micro Mill	Building Erection	Welders	8	10.2	50	0.45	209	-	Electric	0.745701	286,143
Micro Mill	Mechanical Equipment Installation	Air Compressors	4	9	275	0.48	79	375,408		-	-
Micro Mill	Mechanical Equipment Installation	Concrete/Industrial Saws	1	3	20	0.73	79	3,460		-	-
Micro Mill	Mechanical Equipment Installation	Cranes	4	7.8	500	0.29	79	357,396		-	-
Micro Mill	Mechanical Equipment Installation	Forklifts	4	9	200	0.2	79	113,760		-	-
Micro Mill	Mechanical Equipment Installation	Generator Sets	4	10.2	450	0.74	79	1,073,326		-	-
Micro Mill	Mechanical Equipment Installation	Off-Highway Tractors	4	6	750	0.44	79	625,680		-	-
Micro Mill	Mechanical Equipment Installation	Off-Highway Trucks	4	6	750	0.38	79	540,360		-	-
Micro Mill	Mechanical Equipment Installation	Pumps	4	3	100	0.74	79	-	Electric	0.745701	52,312
Micro Mill	Mechanical Equipment Installation	Rough Terrain Forklifts	3	12	250	0.4	79	284,400		-	-
Micro Mill	Mechanical Equipment Installation	Tractors/Loaders/Backhoes	2	6	80	0.37	79	28,061		-	-
Micro Mill	Mechanical Equipment Installation	Trenchers	1	4	250	0.5	79	39,500		-	-
Micro Mill	Mechanical Equipment Installation	Welders	8	9	50	0.45	79	-	Electric	0.745701	95,435
Micro Mill	Process Piping Installation	Air Compressors	4	9	275	0.48	234	1,111,968		-	-
Micro Mill	Process Piping Installation	Concrete/Industrial Saws	1	3	20	0.73	234	10,249		-	-
Micro Mill	Process Piping Installation	Cranes	4	7.8	500	0.29	234	1,058,616		-	-

Micro Mill	Process Piping Installation	Forklifts	4	9	200	0.2	234	336,960		-	-
Micro Mill	Process Piping Installation	Generator Sets	4	10.2	450	0.74	234	3,179,218		-	-
Micro Mill	Process Piping Installation	Off-Highway Tractors	4	6	750	0.44	234	1,853,280		-	-
Micro Mill	Process Piping Installation	Off-Highway Trucks	4	6	750	0.38	234	1,600,560		-	-
Micro Mill	Process Piping Installation	Pumps	4	3	100	0.74	234	-	Electric	0.745701	154,951
Micro Mill	Process Piping Installation	Rough Terrain Forklifts	3	12	250	0.4	234	842,400		-	-
Micro Mill	Process Piping Installation	Tractors/Loaders/Backhoes	2	6	80	0.37	234	83,117		-	-
Micro Mill	Process Piping Installation	Trenchers	1	4	250	0.5	234	117,000		-	-
Micro Mill	Process Piping Installation	Welders	8	9	50	0.45	234	-	Electric	0.745701	282,680
Micro Mill	Paving	Concrete/Industrial Saws	3	6	20	0.73	106	27,857		-	-
Micro Mill	Paving	Excavators	1	9	500	0.38	106	181,260		-	-
Micro Mill	Paving	Graders	1	12	500	0.41	106	260,760		-	-
Micro Mill	Paving	Pavers	2	12	450	0.42	106	480,816		-	-
Micro Mill	Paving	Paving Equipment	3	12	500	0.36	106	686,880		-	-
Micro Mill	Paving	Plate Compactors	1	10.8	50	0.43	106	24,613		-	-
Micro Mill	Paving	Rollers	2	12	250	0.38	106	241,680		-	-
Micro Mill	Paving	Surfacing Equipment	2	4	200	0.3	106	50,880		-	-
Micro Mill	Landscaping	Dumpers/Tenders	1	6	250	0.38	79	45,030		-	-
Micro Mill	Landscaping	Forklifts	1	12	200	0.2	79	37,920		-	-
Micro Mill	Landscaping	Generator Sets	1	12	450	0.74	79	315,684		-	-
Micro Mill	Landscaping	Off-Highway Tractors	1	6	750	0.44	79	156,420		-	-
Micro Mill	Landscaping	Off-Highway Trucks	2	6	750	0.38	79	270,180		-	-
Micro Mill	Landscaping	Sweepers/Scrubbers	2	10.2	200	0.46	79	148,267		-	-
Micro Mill	Landscaping	Tractors/Loaders/Backhoes	2	12	80	0.37	79	56,122		-	-
Micro Mill	Landscaping	Trenchers	1	10.2	250	0.5	79	100,725		-	-
Water Line	Site Preparation	Concrete/Industrial Saws	2	8	81	0.73	5	4,730		-	-
Water Line	Site Preparation	Off-Highway Trucks	1	8	402	0.38	5	6,110		-	-
Water Line	Site Preparation	Rubber Tired Dozers	1	8	247	0.4	5	3,952		-	-
Water Line	Site Preparation	Tractors/Loaders/Backhoes	1	8	97	0.37	5	1,436		-	-
Water Line	Pipeline Installation	Bore/Drill Rigs	1	8	221	0.5	20	17,680		-	-
Water Line	Pipeline Installation	Cranes	1	8	231	0.29	20	10,718		-	-
Water Line	Pipeline Installation	Excavators	1	6	158	0.38	20	7,205		-	-
Water Line	Pipeline Installation	Off-Highway Trucks	1	8	402	0.38	20	24,442		-	-
Water Line	Pipeline Installation	Pumps	1	8	84	0.74	20	9,946		-	-
Water Line	Pipeline Installation	Rubber Tired Dozers	1	6	247	0.4	20	11,856		-	-
Water Line	Pipeline Installation	Tractors/Loaders/Backhoes	1	7	97	0.37	20	5,025		-	-
Water Line	Paving	Off-Highway Trucks	1	8	402	0.38	5	6,110		-	-
Water Line	Paving	Paving Equipment	1	7	132	0.36	5	1,663		-	-
Water Line	Paving	Plate Compactors	1	7	8	0.43	5	120		-	-
Water Line	Paving	Rollers	1	7	80	0.38	5	1,064		-	-
Traffic Project 1	Grading/Excavation	Graders	1	6	187	0.41	5	2,300		-	-
Traffic Project 1	Grading/Excavation	Off-Highway Trucks	1	8	402	0.38	5	6,110		-	-
Traffic Project 1	Grading/Excavation	Rubber Tired Dozers	1	6	247	0.4	5	2,964		-	-
Traffic Project 1	Grading/Excavation	Tractors/Loaders/Backhoes	1	7	97	0.37	5	1,256		-	-
Traffic Project 1	Trenching/Electrical	Excavators	1	8	158	0.38	5	2,402		-	-
Traffic Project 1	Trenching/Electrical	Off-Highway Trucks	1	8	402	0.38	5	6,110		-	-
Traffic Project 1	Trenching/Electrical	Rubber Tired Dozers	1	8	247	0.4	5	3,952		-	-
Traffic Project 1	Trenching/Electrical	Tractors/Loaders/Backhoes	1	8	97	0.37	5	1,436		-	-
Traffic Project 1	Signal Installation	Bore/Drill Rigs	1	8	221	0.5	5	4,420		-	-
Traffic Project 1	Signal Installation	Cranes	1	4	231	0.29	5	1,340		-	-
Traffic Project 1	Signal Installation	Off-Highway Trucks	1	8	402	0.38	5	6,110		-	-
Traffic Project 1	Signal Installation	Tractors/Loaders/Backhoes	2	8	97	0.37	5	2,871		-	-
Traffic Project 1	Paving	Cement and Mortar Mixers	4	6	9	0.56	5	605		-	-
Traffic Project 1	Paving	Off-Highway Trucks	1	8	402	0.38	5	6,110		-	-
Traffic Project 1	Paving	Pavers	1	7	130	0.42	5	1,911		-	-
Traffic Project 1	Paving	Rollers	1	7	80	0.38	5	1,064		-	-
Traffic Project 1	Paving	Tractors/Loaders/Backhoes	1	7	97	0.37	5	1,256		-	-
Traffic Project 1	Architectural Coating	Air Compressors	1	6	78	0.48	5	1,123		-	-
Traffic Project 1	Architectural Coating	Off-Highway Trucks	1	8	402	0.38	5	6,110		-	-
Traffic Project 3	Paving	Cement and Mortar Mixers	4	6	9	0.56	5	605		-	-
Traffic Project 3	Paving	Off-Highway Trucks	1	8	402	0.38	5	6,110		-	-
Traffic Project 3	Paving	Pavers	1	7	130	0.42	5	1,911		-	-
Traffic Project 3	Paving	Rollers	1	7	80	0.38	5	1,064		-	-
Traffic Project 3	Paving	Tractors/Loaders/Backhoes	1	7	97	0.37	5	1,256		-	-
Traffic Project 3	Architectural Coating	Air Compressors	1	6	78	0.48	5	1,123		-	-
Traffic Project 3	Architectural Coating	Off-Highway Trucks	1	8	402	0.38	5	6,110		-	-
							0	-		-	-
							0	-		-	-
							0	-		-	-
							>100 hp	**64,308,900**		**Total Electricity**	**2,043,934**
							<100 hp	**1,055,789**		**Average per Year**	**1,021,967**

Mojave Micro Mill
Project Operational Energy Demand

Electricity	kWh/yr	Electricity from Water (kWh/yr)	MWh/yr
General Light Industry	471,865	57,802	529.7
General Office Building	146,450	28,295	174.7
City Park	0	0	-
Micro Mill	248,064,000	171,256	248,235.3
Solar Array	(25,550,000)		(25,550.0)
Water Treatment Plant		1,102,380	1,102.4
Offroad Mobile Sources	173,003	-	173.0
Total Building Energy	**248,682,315**	**-**	**248,682.3**
Total	**248,855,318**	**1,359,732**	**250,215.0**
Total with Solar	**223,305,318**	**1,359,732**	**224,665.0**

Source: California Air Resources Board, CalEEMod, Version 2020.4.0.

Electricity	MWh/yr
SCE Total Energy Sales	82,048,000
Project Annual	249,027
Percent Project of SCE	0.3035%

Source: SCE, 2021 Annual Report, https://s3.amazonaws.com/cms.ipressroom.com/405/files/202210/2021-eix-sce-annual-report

Water	Mgal/yr	MWh/yr
General Light Industry	8	58
General Office Building	4	28
City Park	13	85
Micro Mill	0	-
Total	**25**	**171**

Electricity Intensity Factors	kWh/Mgal
Electricity Factor - Supply	3,044
Electricity Factor - Treat	725
Electricity Factor - Distribute	1,537
Electricity Factor - Wastewater Treatment	1,501

Electricity from Water Demand	kWh/yr	MWh/yr
Total	**171,256**	**171.26**

Source: California Air Resources Board, CalEEMod, Version 2020.4.0.
Water Demand based on Project Water supply Assessment
Sewage Facilities Charge, Sewage Generation Factor for Residential and Commercial Categories, 2012.

Diesel and Gasoline	Gallons/yr
Emergency Generators (diesel)	959
Onroad Mobile Sources (diesel)	1,600,166
Fuel Tanks (diesel)	52,000
Offroad Mobile Sources (diesel)	301,831
Offroad Mobile Sources (propane)	250683.5
Onroad Mobile Sources (gasoline)	347,798
Total Diesel	**1,954,956**
Total Gasoline	**347,798**

Mojave Micro Mill
Energy Demand
Fuel Usage from VMT

Employee Trips (LDA, LDT1, LDT2): 10,268,910 miles/year
Truck Trips (HHDT): 10,013,775 miles/year

Fuel Type:[1]	Gasoline	Diesel	Electricity	Natural Gas	Plug-in Hybrid
Light Duty Percent:	93.6%	0.2%	3.8%	0.0%	2.4%
Heavy Duty Percent:	0.01%	98.8%	0.5%	0.7%	0.0%
Light Duty MPG:	27.95	39.25	0.00	0.00	62.64
Heavy Duty MPG:	3.65	6.19	0.00	5.04	0.00
Light Duty (LDA, LDT1, LDT2) VMT by Fuel Type:	9,607,734	22,385	392,934	-	245,857
HHDT VMT by Fuel Type:	542	9,895,437	49,890	67,906	-
Light Duty Fuel Use (gal):	343,725	570	-	-	3,925
Heavy Duty Fuel Use (gal):	149	1,599,595	-	1,943,072	-
Total Fuel Use (gal):	**343,874**	**1,600,166**	**-**	**1,943,072**	**3,925**

-98.8%

	Kern County Fuel Consumption [3]	
	Gasoline	Diesel
Kern County:	406,000,000	272,365,805
Project Annual:	347,798	1,600,166
Percent Net Project of Los Angeles County:	0.086%	0.588%

Notes:

1. California Air Resources Board, EMFAC2021 (SJVAB, MDAB; Annual; 2025', Aggregate Fleet).
2. Assumes electric vehicles would replace traditional gasoline-fueled vehicles.
3. California Energy Commission, California Retail Fuel Outlet Annual Reporting (CEC-A15) Results, 2018. Available at: https://ww2.energy.ca.gov/almanac/transportation_data/gasoline/piira_retail_survey.html. Accessed March 2020. Diesel is adjusted to account for retail (48%) and non-retail (52%) diesel sales.
4. LAV/Pinacle Engineering, TA, October 2022.

250671

Summary of Mojave Micro Mill Operational GHG Emissions

Tons of Material	Emissions (MTCO2e/yr)			
	Transportation	Electricity	Manufacturing	Total
456,000	16,530	44,200	109,440	170,170

Tons of Material	Electricity	
	MWh/yr	MTCO2e/yr
456,000	248,064	44,200

Notes:

- Tons of material from MojaveMicroMill_OpsEmissionCalcs.xlsx

Mojave Micro mill
Project Operational Energy Demand
Air Quality and Greenhouse Gas Assessment

Emergency Generator Emissions

updated: 12/14/2022

Conversion Factors

HP/kW	1.3410	
PM10 Fraction of Total PM	0.960	Table A - Updated CEIDARS Table with PM2.5 Fractions, INTERNAL COMBUSTION - DISTILLATE AND DIESEL-ELECTRIC GENERATION
PM2.5 Fraction of Total PM	0.937	Table A - Updated CEIDARS Table with PM2.5 Fractions, INTERNAL COMBUSTION - DISTILLATE AND DIESEL-ELECTRIC GENERATION
CO2 g/gal	10.21	Climate Registry, Table 13.1: https://www.theclimateregistry.org/wp-content/uploads/2014/11/2016-Climate-Registry-Default-Emission-Factors.pdf
CH4 g/gal	0.58	Climate Registry, Table 13.7: https://www.theclimateregistry.org/wp-content/uploads/2014/11/2016-Climate-Registry-Default-Emission-Factors.pdf
N2O g/gal	0.26	Climate Registry, Table 13.7: https://www.theclimateregistry.org/wp-content/uploads/2014/11/2016-Climate-Registry-Default-Emission-Factors.pdf
GWP CH4	25	IPCC AR4
GWP N2O	298	IPCC AR4
CO2e g/gal	10,302	Diesel
CO2 g/gal	10,210	Diesel
CO2/CO2e	0.9911	Diesel
lbs CO2/hp-hr	0.9460	Natural Gas Emergency Generator, https://www.epa.gov/sites/default/files/2016-09/boilers_and_emergency_engines_pte_calculator_version_1.0.xlsx

Emergency Generator - Natural Gas

Ratings:	-	kW	*(based on engineering assumptions)*
	1,800	HP	*(based on engineering assumptions; conversion from kW to hp)*
		kW	*(based on engineering assumptions)*
	-	HP	*(conversion from kW to hp)*
Load Factor:	0.74		*(based on CalEEMod Generator Set Load Factor)*
Engine Emissions Tier:	Rule 1470 Compliant		*(compliance with CARB and AQMD diesel regulations)*
Operating Hours per Unit:	2	hours/day	*(testing/maintenance)*
	100	hours/year	*(testing/maintenance, Regulatory Limit per SCAQMD Rule 1470)*

Emergency Generator - Natural Gas 250671

Ratings:	-	kW	*(based on engineering assumptions)*
	150	HP	*(based on engineering assumptions; conversion from kW to hp)*
		kW	*(based on engineering assumptions)*
		HP	*(conversion from kW to hp)*
Load Factor:	0.74		*(based on CalEEMod Generator Set Load Factor)*
Engine Emissions Tier:	Rule 1470 Compliant		*(compliance with CARB and AQMD diesel regulations)*
Operating Hours per Unit:	2	hours/day	*(testing/maintenance)*
	100	hours/year	*(testing/maintenance, Regulatory Limit per SCAQMD Rule 1470)*

Emergency Generator - Diesel

Ratings:	-	kW	*(based on engineering assumptions)*
	250	HP	*(based on engineering assumptions; conversion from kW to hp)*
		kW	*(based on engineering assumptions)*
		HP	*(conversion from kW to hp)*
Load Factor:	0.74		*(based on CalEEMod Generator Set Load Factor)*
Engine Emissions Tier:	Rule 1470 Compliant		*(compliance with CARB and AQMD diesel regulations)*
Operating Hours per Unit:	2	hours/day	*(testing/maintenance)*
	100	hours/year	*(testing/maintenance, Regulatory Limit per SCAQMD Rule 1470)*

Emergency Generator - Natural Gas

Units	Greenhouse Gases [1]	
	CO_2	CO_2e
hp-hr/day	2664.00	
hp-hr/yr	133,200.00	
lbs/day	2,520.14	2,542.85
lbs/yr	126,007.20	127,142.38
tons/yr	63.00	63.57
metric tons/yr	**57.16**	**57.67**

Fuel Consumption (mmcf)
1,058,268

Emergency Generator - Natural Gas

Units	Greenhouse Gases [1]	
	CO_2	CO_2e
hp-hr/day	222.00	224.00
hp-hr/yr	11100.00	11,200.00
lbs/day	210.01	211.90
lbs/yr	10,500.60	10,595.20
tons/yr	5.25	5.30
metric tons/yr	**4.76**	**4.81**

Fuel Consumption (mmcf)
88,189

Emergency Generator - Diesel

Units	Greenhouse Gases [1]	
	CO_2	CO_2e
g/kW-hr	—	—
g/HP-hr	526.17	530.91
lbs/hr	214.60	216.53
lbs/day	429.20	433.07
lbs/yr	21,460.00	21,653.33
tons/yr	10.73	10.83
metric tons/yr	**9.73**	**9.82**

Fuel Consumption (gal)
959

Total Emergency Generator Emissions

Units	Greenhouse Gases [1]	
	CO_2	CO_2e
lbs/hr	13978.60	11416.53
lbs/day	3159.36	3187.82
lbs/yr	157967.80	159390.90
tons/yr	78.98	79.70
metric tons/yr	**71.65**	**72.30**

Fuel Consumption	
Diesel (gal)	959
Natural Gas (mmcf)	1,146,457

Notes:

1. Emission factor for CO2: U.S. Environmental Protection Agency, AP-42 Compilation of Air Pollutant Emission Factors, Fifth Edition, Section 3.4, Table 3.4-1.
   Emissions of GHGs assume 99.11% of the CO2e emissions occur as CO2, which is typical for off-road diesel engines.

Mojave Micro Mill
Solar Array
Greenhouse Gas Analysis

		GHG Emissions (lbs/yr)				
Source	**Electricity Demand from Water Demand (MWh)**	**CO2**	**CH4**	**N20**	**CO2e**	**MTCO2e (MT/yr)**
Solar	-25,550	-9,984,940	-843	-102	-10,036,474	-4,552

GHG	**Intensity factor (lbs/MWh)**
CO2	390.80
CH4	0.033
N2O	0.004

Mojave Micro Mill
Water Treatment Plant
Greenhouse Gas Analysis

497 Acre-feet/year
161,947,947 gal/year
162 mgal/year

CalEEMod Water Electricity Factors	Electricity Intensity Factor To Supply (kWh/Mgal)	Electricity Intensity Factor To Treat (kWh/Mgal)	Electricity Intensity Factor To Distribute (kWh/Mgal)	Electricity Intensity Factor For Wastewater Treatment (kWh/Mgal)
	3044	725	1537	1501

		GHG Emissions (lbs/yr)				
Source	**Electricity Demand from Water Demand (MWh)**	**CO2**	**CH4**	**N20**	**CO2e**	**MTCO2e (MT/yr)**
Water Treatment	1,102.4	430,810	36	4	433,033	196

Mojave Micro Mill
Construction Energy Analysis

Off-Road Equipment

Equipment ≤ 100 hp

pounds diesel fuel/hp-hr (lb/hp-hr):[1]	0.408	lb/hp-hr
diesel density (lb/gal):[1]	7.11	lb/gal
diesel gallons/hp-hr:	0.0574	gal/hp-hr
<100 hp	12,950	hp-hr
Total diesel gallons:	743	gal

Equipment > 100 hp

pounds diesel fuel/hp-hr (lb/hp-hr):[1]	0.367	lb/hp-hr
diesel density (lb/gal):[1]	7.11	lb/gal
diesel gallons/hp-hr:	0.0516	gal/hp-hr
>100 hp	5,832,160	hp-hr
Total diesel gallons:	301,088	gal

0

Total diesel gallons (off-road equipment): 301,831 gal

Equipment	Shifts/Day	Hours/Day	HP	Load	Days	Total hp-hr/yr	Fuel Type	Electricity (kWh/yr)	Propane (gallons/yr)
Scrap Yard Crane Grab	3	8	270	0.29	350	657,720	Diesel	-	-
Scrap Yard Crane Mag	2	8	270	0.29	350	438,480	Diesel	-	-
Scrap Yard Crane Mag	1	8	270	0.29	350	219,240	Diesel	-	-
Slag Yard Crane Mag	1	8	270	0.29	250	156,600	Diesel	-	-
Cat 972 - Hot	3	8	340	0.36	350	1,028,160	Diesel	-	-
Cat 972 - Cold Slag	1	8	340	0.37	250	251,600	Diesel	-	-
Cat 972 - Cold Slag	1	8	340	0.37	250	251,600	Diesel	-	-
Cat 972 - Cold Scrap	1	8	340	0.37	350	352,240	Diesel	-	-
Pallet Carrier	3	8	300	0.4	350	1,008,000	Diesel	-	-
Pallet Carrier	2	8	300	0.4	350	672,000	Diesel	-	-
Breaking Crane	1	8	400	0.29	250	-	Electric	173,003	-
Refractory tear out	1	4	200	0.34	250	68,000	Diesel	-	-
Water Truck	2	8	240	0.38	350	510,720	Diesel	-	-
Skid Steer	1	2	70	0.37	250	12,950	Diesel	-	-
Telehandler	1	2	160	0.4	250	32,000	Diesel	-	250,671
Maintenance Truck	1	4	240	0.38	250	91,200	Diesel	-	-
Lube Truck	1	4	200	0.38	250	76,000	Diesel	-	-
Fork Truck	1	2	40	0.2	250	-	Propane	-	13
Man Lift	1	2	120	0.31	250	18,600	Diesel	-	-
					>100 hp	**5,832,160**			
					<100 hp	**12,950**			
Total						**5,845,110**		**173,003**	**250,684**

Pacific Steel

Mojave Micro Mill Project

Mojave, CA

Assumptions

Two diesel tanks

5000 gallons total

Process Description

1. 1,000-gallon gasoline storage tank and a 3,000-gallon diesel fuel tank
2. Tank breathing and working losses

Emissions Calculation Methodology

Diesel Tank: n_FE01

Run Tanks 4.0.9d

Gasoline Tank: n_FE02

Run Tanks 4.0.9d

Emissions Calculation Inputs

n_FE01

Shell Length	L	20	ft
Diameter	D	5	ft
Tank Size	V	1000	gal
Tank Throughput	v	52000	gal/yr
Vaccum Setting	P_-	-0.03	psig
Pressure Setting	P_+	0.03	psig

Emissions Calculation

Source	Fuel Use		
n_FE01	533	MTCO2e/yr	*from Tanks reports*
Total	**533**	**MTCO2e/yr**	

Mojave Micro Mill
Project Operational Energy Demand

Electricity	kWh/yr	Electricity from Water (kWh/yr)	MWh/yr
General Light Industry	364,272	110,568	474.8
General Office Building	133,255	54,124	187.4
City Park	0	0	-
Micro Mill	248,064,000	327,592	248,391.6
Solar Array	(25,550,000)		(25,550.0)
Water Treatment Plant		2,108,724	2,108.7
Offroad Mobile Sources	173,003	-	173.0
Total Building Energy	**248,561,527**	**-**	**248,561.5**
Total	**248,734,530**	**2,601,009**	**251,335.5**
Total with Solar	**223,184,530**	**2,601,009**	**225,785.5**

Source: California Air Resources Board, CalEEMod, Version 2020.4.0.

Electricity	MWh/yr
SCE Total Energy Sales	82,048,000
Project Annual	249,062
Percent Project of SCE	0.3036%

Source: SCE, 2021 Annual Report, https://s3.amazonaws.com/cms.ipressroom.com/405/files/202210/2021-eix-sce-annual-report

Water	Mgal/yr	MWh/yr
General Light Industry	8	111
General Office Building	4	54
City Park	13	163
Micro Mill	0	-
Total	**25**	**328**

Electricity Intensity Factors	kWh/Mgal
Electricity Factor - Supply	9,727
Electricity Factor - Treat	111
Electricity Factor - Distribute	1,272
Electricity Factor - Wastewater Treatment	1,911

Electricity from Water Demand	kWh/yr	MWh/yr
Total	**327,592**	**327.59**

Source: California Air Resources Board, CalEEMod, Version 2020.4.0.
Water Demand based on Project Water supply Assessment
Sewage Facilities Charge, Sewage Generation Factor for Residential and Commercial Categories, 2012.

Diesel and Gasoline	Gallons/yr
Emergency Generators (diesel)	959
Onroad Mobile Sources (diesel)	1,600,166
Fuel Tanks (diesel)	52,000
Offroad Mobile Sources (diesel)	301,831
Offroad Mobile Sources (propane)	250683.5
Onroad Mobile Sources (gasoline)	347,798
Total Diesel	**1,954,956**
Total Gasoline	**347,798**

Natural Gas	kBtu/yr	cubic foot (cf)
General Light Industry	1,871,900	1,808,599
General Office Building	49,735	48,053
City Park	0	-
Micro Mill	0	-
Emergency Generators	-	1,146,457
Mobile Sources	1,943,072	1,877,364
Total	**3,864,707**	**4,880,473**

Source: California Air Resources Board, CalEEMod, Version 2020.4.0.
Conversion factor of 1,035 Btu per cubic foot based on United States Energy Information Administration data
(see: USEIA, Natural Gas, Heat Content of Natural Gas Consumed, February 28, 2018,
https://www.eia.gov/dnav/ng/ng_cons_heat_a_EPG0_VGTH_btucf_a.htm. Accessed March 2020.)

Natural Gas	million cubic foot (cf)
SoCalGas 2025	832,200
Project Annual	4.88
Percent Net Project of SoCalGas	0.0006%

Source: California Gas and Electric Utilities, 2022 California Gas
Report, p. 185,2022. https://www.socalgas.com/sites/default/files/Joint_Utility_Biennial_Comprehensive_California_Gas_Report

Mojave Micro Mill
Energy Demand
Fuel Usage from VMT

Employee Trips (LDA, LDT1, LDT2): 10,268,910 miles/year
Truck Trips (HHDT): 10,013,775 miles/year

Fuel Type:[1]	Gasoline	Diesel	Electricity	Natural Gas	Plug-in Hybrid
Light Duty Percent:	93.6%	0.2%	3.8%	0.0%	2.4%
Heavy Duty Percent:	0.01%	98.8%	0.5%	0.7%	0.0%
Light Duty MPG:	27.95	39.25	0.00	0.00	62.64
Heavy Duty MPG:	3.65	6.19	0.00	5.04	0.00
Light Duty (LDA, LDT1, LDT2) VMT by Fuel Type:	9,607,734	22,385	392,934	-	245,857
HHDT VMT by Fuel Type:	542	9,895,437	49,890	67,906	-
Light Duty Fuel Use (gal):	343,725	570	-	-	3,925
Heavy Duty Fuel Use (gal):	149	1,599,595	-	1,943,072	-
Total Fuel Use (gal):	**343,874**	**1,600,166**	**-**	**1,943,072**	**3,925**

-98.8%

	Kern County Fuel Consumption [3]	
	Gasoline	Diesel
Kern County:	406,000,000	272,365,805
Project Annual:	347,798	1,600,166
Percent Net Project of Los Angeles County:	0.086%	0.588%

Notes:

1. California Air Resources Board, EMFAC2021 (SJVAB, MDAB; Annual; 2025', Aggregate Fleet).
2. Assumes electric vehicles would replace traditional gasoline-fueled vehicles.
3. California Energy Commission, California Retail Fuel Outlet Annual Reporting (CEC-A15) Results, 2018. Available at: https://ww2.energy.ca.gov/almanac/transportation_data/gasoline/piira_retail_survey.html. Accessed March 2020. Diesel is adjusted to account for retail (48%) and non-retail (52%) diesel sales.
4. LAV/Pinacle Engineering, TA, October 2022.

Summary of Mojave Micro Mill Operational GHG Emissions

Tons of Material	Emissions (MTCO2e/yr)			
	Transportation	Electricity	Manufacturing	Total
456,000	16,530	44,200	109,440	170,170

Tons of Material	Electricity	
	MWh/yr	MTCO2e/yr
456,000	248,064	44,200

Notes:

- Tons of material from MojaveMicroMill_OpsEmissionCalcs.xlsx

Mojave Micro mill
Project Operational Energy Demand
Air Quality and Greenhouse Gas Assessment

Emergency Generator Emissions

updated: 12/14/2022

Conversion Factors

HP/kW	1.3410	
PM10 Fraction of Total PM	0.960	Table A - Updated CEIDARS Table with PM2.5 Fractions, INTERNAL COMBUSTION - DISTILLATE AND DIESEL-ELECTRIC GENERATION
PM2.5 Fraction of Total PM	0.937	Table A - Updated CEIDARS Table with PM2.5 Fractions, INTERNAL COMBUSTION - DISTILLATE AND DIESEL-ELECTRIC GENERATION
CO2 g/gal	10.21	Climate Registry, Table 13.1: https://www.theclimateregistry.org/wp-content/uploads/2014/11/2016-Climate-Registry-Default-Emission-Factors.pdf
CH4 g/gal	0.58	Climate Registry, Table 13.7: https://www.theclimateregistry.org/wp-content/uploads/2014/11/2016-Climate-Registry-Default-Emission-Factors.pdf
N2O g/gal	0.26	Climate Registry, Table 13.7: https://www.theclimateregistry.org/wp-content/uploads/2014/11/2016-Climate-Registry-Default-Emission-Factors.pdf
GWP CH4	25	IPCC AR4
GWP N2O	298	IPCC AR4
CO2e g/gal	10,302	Diesel
CO2 g/gal	10,210	Diesel
CO2/CO2e	0.9911	Diesel
lbs CO2/hp-hr	0.9460	Natural Gas Emergency Generator, https://www.epa.gov/sites/default/files/2016-09/boilers_and_emergency_engines_pte_calculator_version_1.0.xlsx

Emergency Generator - Natural Gas

Ratings:	-	kW	*(based on engineering assumptions)*
	1,800	HP	*(based on engineering assumptions; conversion from kW to hp)*
		kW	*(based on engineering assumptions)*
	-	HP	*(conversion from kW to hp)*
Load Factor:	0.74		*(based on CalEEMod Generator Set Load Factor)*
Engine Emissions Tier:	Rule 1470 Compliant		*(compliance with CARB and AQMD diesel regulations)*
Operating Hours per Unit:	2	hours/day	*(testing/maintenance)*
	100	hours/year	*(testing/maintenance, Regulatory Limit per SCAQMD Rule 1470)*

Emergency Generator - Natural Gas 250671

Ratings:	-	kW	*(based on engineering assumptions)*
	150	HP	*(based on engineering assumptions; conversion from kW to hp)*
		kW	*(based on engineering assumptions)*
		HP	*(conversion from kW to hp)*
Load Factor:	0.74		*(based on CalEEMod Generator Set Load Factor)*
Engine Emissions Tier:	Rule 1470 Compliant		*(compliance with CARB and AQMD diesel regulations)*
Operating Hours per Unit:	2	hours/day	*(testing/maintenance)*
	100	hours/year	*(testing/maintenance, Regulatory Limit per SCAQMD Rule 1470)*

Emergency Generator - Diesel

Ratings:	-	kW	*(based on engineering assumptions)*
	250	HP	*(based on engineering assumptions; conversion from kW to hp)*
		kW	*(based on engineering assumptions)*
		HP	*(conversion from kW to hp)*
Load Factor:	0.74		*(based on CalEEMod Generator Set Load Factor)*
Engine Emissions Tier:	Rule 1470 Compliant		*(compliance with CARB and AQMD diesel regulations)*
Operating Hours per Unit:	2	hours/day	*(testing/maintenance)*
	100	hours/year	*(testing/maintenance, Regulatory Limit per SCAQMD Rule 1470)*

Emergency Generator - Natural Gas

Units	Greenhouse Gases [1]	
	CO_2	CO_2e
hp-hr/day	2664.00	
hp-hr/yr	133,200.00	
lbs/day	2,520.14	2,542.85
lbs/yr	126,007.20	127,142.38
tons/yr	63.00	63.57
metric tons/yr	**57.16**	**57.67**

Fuel Consumption (mmcf)
1,058,268

Emergency Generator - Natural Gas

Units	Greenhouse Gases [1]	
	CO_2	CO_2e
hp-hr/day	222.00	224.00
hp-hr/yr	11100.00	11,200.00
lbs/day	210.01	211.90
lbs/yr	10,500.60	10,595.20
tons/yr	5.25	5.30
metric tons/yr	**4.76**	**4.81**

Fuel Consumption (mmcf)
88,189

Emergency Generator - Diesel

Units	Greenhouse Gases [1]	
	CO_2	CO_2e
g/kW-hr	—	—
g/HP-hr	526.17	530.91
lbs/hr	214.60	216.53
lbs/day	429.20	433.07
lbs/yr	21,460.00	21,653.33
tons/yr	10.73	10.83
metric tons/yr	**9.73**	**9.82**

Fuel Consumption (gal)
959

Total Emergency Generator Emissions

Units	Greenhouse Gases [1]	
	CO_2	CO_2e
lbs/hr	13978.60	11416.53
lbs/day	3159.36	3187.82
lbs/yr	157967.80	159390.90
tons/yr	78.98	79.70
metric tons/yr	**71.65**	**72.30**

Fuel Consumption	
Diesel (gal)	959
Natural Gas (mmcf)	1,146,457

Notes:

1. Emission factor for CO2: U.S. Environmental Protection Agency, AP-42 Compilation of Air Pollutant Emission Factors, Fifth Edition, Section 3.4, Table 3.4-1.
   Emissions of GHGs assume 99.11% of the CO2e emissions occur as CO2, which is typical for off-road diesel engines.

Mojave Micro Mill
Solar Array
Greenhouse Gas Analysis

		GHG Emissions (lbs/yr)				
Source	**Electricity Demand from Water Demand (MWh)**	**CO2**	**CH4**	**N20**	**CO2e**	**MTCO2e (MT/yr)**
Solar	-25,550	-9,984,940	-843	-102	-10,036,474	-4,552

GHG	**Intensity factor (lbs/MWh)**
CO2	390.80
CH4	0.033
N2O	0.004

Mojave Micro Mill
Water Treatment Plant
Greenhouse Gas Analysis

497 Acre-feet/year
161,947,947 gal/year
162 mgal/year

CalEEMod Water Electricity Factors	Electricity Intensity Factor To Supply (kWh/Mgal)	Electricity Intensity Factor To Treat (kWh/Mgal)	Electricity Intensity Factor To Distribute (kWh/Mgal)	Electricity Intensity Factor For Wastewater Treatment (kWh/Mgal)
	9727	111	1272	1911

		GHG Emissions (lbs/yr)				
Source	Electricity Demand from Water Demand (MWh)	CO2	CH4	N20	CO2e	MTCO2e (MT/yr)
Water Treatment	2,108.7	824,089	70	8	828,343	376

Mojave Micro Mill
Construction Energy Analysis

Off-Road Equipment

Equipment ≤ 100 hp

pounds diesel fuel/hp-hr (lb/hp-hr):[1]	0.408	lb/hp-hr
diesel density (lb/gal):[1]	7.11	lb/gal
diesel gallons/hp-hr:	0.0574	gal/hp-hr
<100 hp	12,950	hp-hr
Total diesel gallons:	743	gal

Equipment > 100 hp

pounds diesel fuel/hp-hr (lb/hp-hr):[1]	0.367	lb/hp-hr
diesel density (lb/gal):[1]	7.11	lb/gal
diesel gallons/hp-hr:	0.0516	gal/hp-hr
>100 hp	5,832,160	hp-hr
Total diesel gallons:	301,088	gal

0

Total diesel gallons (off-road equipment): 301,831 gal

Equipment	Shifts/Day	Hours/Day	HP	Load	Days	Total hp-hr/yr	Fuel Type	Electricity (kWh/yr)	Propane (gallons/yr)
Scrap Yard Crane Grab	3	8	270	0.29	350	657,720	Diesel	-	-
Scrap Yard Crane Mag	2	8	270	0.29	350	438,480	Diesel	-	-
Scrap Yard Crane Mag	1	8	270	0.29	350	219,240	Diesel	-	-
Slag Yard Crane Mag	1	8	270	0.29	250	156,600	Diesel	-	-
Cat 972 - Hot	3	8	340	0.36	350	1,028,160	Diesel	-	-
Cat 972 - Cold Slag	1	8	340	0.37	250	251,600	Diesel	-	-
Cat 972 - Cold Slag	1	8	340	0.37	250	251,600	Diesel	-	-
Cat 972 - Cold Scrap	1	8	340	0.37	350	352,240	Diesel	-	-
Pallet Carrier	3	8	300	0.4	350	1,008,000	Diesel	-	-
Pallet Carrier	2	8	300	0.4	350	672,000	Diesel	-	-
Breaking Crane	1	8	400	0.29	250	-	Electric	173,003	-
Refractory tear out	1	4	200	0.34	250	68,000	Diesel	-	-
Water Truck	2	8	240	0.38	350	510,720	Diesel	-	-
Skid Steer	1	2	70	0.37	250	12,950	Diesel	-	-
Telehandler	1	2	160	0.4	250	32,000	Diesel	-	250,671
Maintenance Truck	1	4	240	0.38	250	91,200	Diesel	-	-
Lube Truck	1	4	200	0.38	250	76,000	Diesel	-	-
Fork Truck	1	2	40	0.2	250	-	Propane	-	13
Man Lift	1	2	120	0.31	250	18,600	Diesel	-	-
					>100 hp	**5,832,160**			
					<100 hp	**12,950**			
Total						**5,845,110**		**173,003**	**250,684**

Pacific Steel

Mojave Micro Mill Project

Mojave, CA

Assumptions

Two diesel tanks

5000 gallons total

Process Description

1. 1,000-gallon gasoline storage tank and a 3,000-gallon diesel fuel tank
2. Tank breathing and working losses

Emissions Calculation Methodology

Diesel Tank: n_FE01

Run Tanks 4.0.9d

Gasoline Tank: n_FE02

Run Tanks 4.0.9d

Emissions Calculation Inputs

n_FE01

Shell Length	L	20	ft
Diameter	D	5	ft
Tank Size	V	1000	gal
Tank Throughput	v	52000	gal/yr
Vaccum Setting	P_-	-0.03	psig
Pressure Setting	P_+	0.03	psig

Emissions Calculation

Source	Fuel Use		
n_FE01	533	MTCO2e/yr	*from Tanks reports*
Total	**533**	**MTCO2e/yr**	

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Appendix G-2

Greenhouse Gas and Energy Analysis of Off-Site Power Utilities

626 Wilshire Boulevard
Suite 1100
Los Angeles, CA 90017
213.599.4300 phone
213.599.4301 fax

esassoc.com

memorandum

date	August 7, 2023
to	Pacific Steel Group
cc	
from	Anitra Rice, ESA
subject	Mojave Micro Mill Project – Greenhouse Gas and Energy Analysis of Off-Site Power Utilities

Introduction

The Pacific Steel Group (the "Applicant") is proposing to develop the Mojave Micro Mill Project (proposed Micro Mill), which consists of the construction of a micro mill facility and associated infrastructure necessary to produce reinforcing bar (rebar) from scrap metal (e.g., shredded automobiles, appliances, structural and sheet metal, and other pre-processed steel bundles) through various recycling processes. The proposed Micro Mill is located in unincorporated southeastern Kern County, in central California. The micro mill facility would be developed on two vacant parcels, totaling approximately 174 acres located at 860 Sopp Road, Mojave, California, along Sierra Highway in Kern County. The proposed Micro Mill is located approximately 57 miles southeast of the City of Bakersfield, approximately 4 miles north of the community of Rosamond, and 8 miles south of Mojave.

The Greenhouse Gas and Energy Technical Report (Technical Report) for the project was completed in February 2023. At the time the Technical Report was written, the off-site power and fiber-optic (telecommunication) lines were not included in the project description. The project description has since been updated to include the construction and installation of power and telecommunication connection lines that would serve the project. This memorandum provides an analysis of the air quality impacts associated with construction and installation of power and telecommunication connection lines for the proposed Micro Mill and includes a description of ESA's assumptions and the results of the analysis.

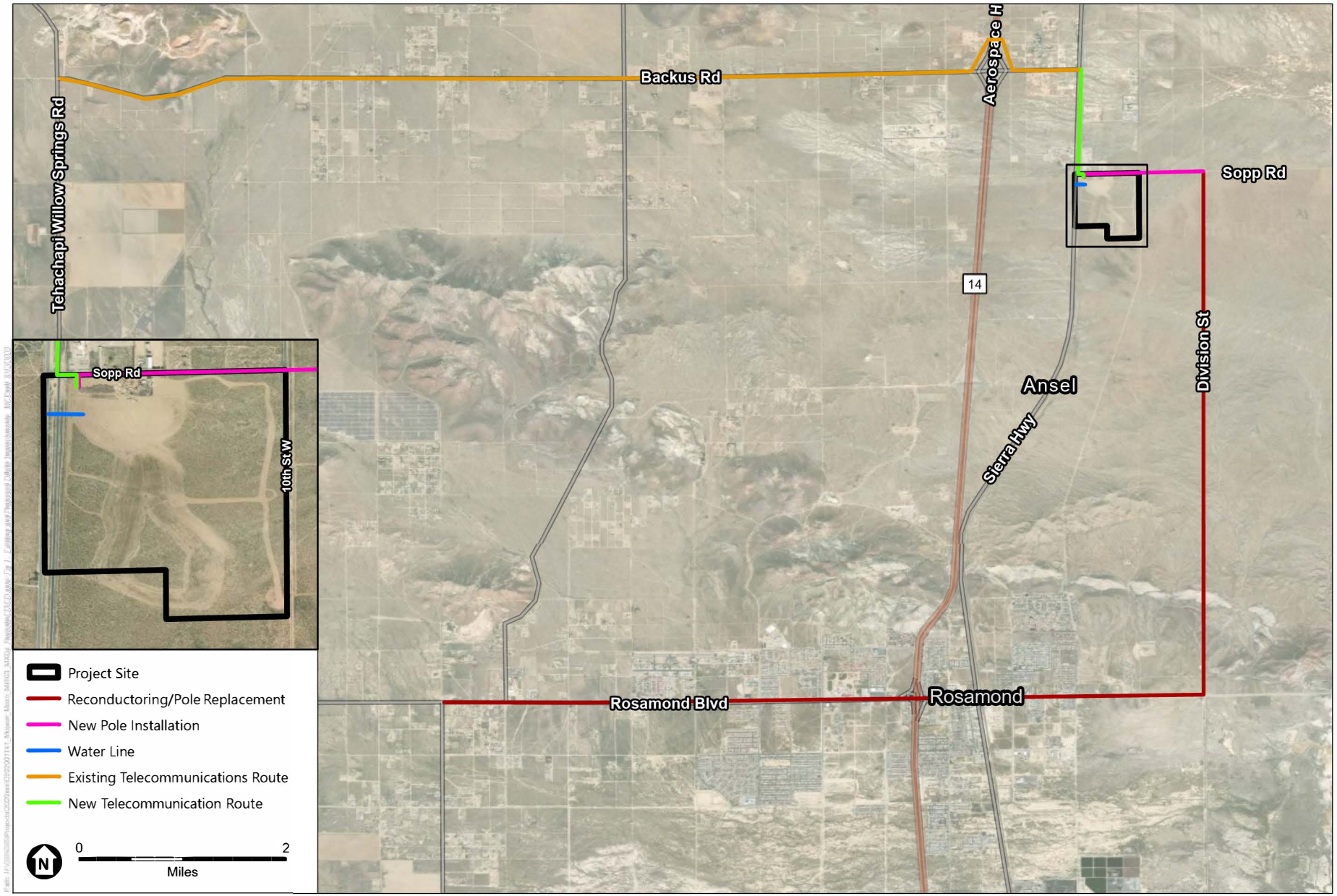
Power & Telecommunication

Southern California Edison (SCE) is the utility provider for the project site. In order to supply power to the project site, SCE would require the installation of two main components: a power line and a telecommunication line. The power line would consist of an upgrade to a portion of the Corum-Goldtown-Rosamond 66 kilovolt (kV) line, which runs from the Rosamond Substation (on the corner of Rosamond Boulevard and 60th Street W) parallel to Rosamond Boulevard before connecting to the north-south 66 kV line at approximately Rosamond Boulevard/Division Street, within the Edwards Air Force Base (EAFB) utility corridor. The connection would

continue north within EAFB's utility corridor approximately following the path of Division Street until Sopp Road. A new 66 kV power line would be erected from the corner of Sopp Road and Division Street to the project site at 860 Sopp Road. This new power line would be approximately 0.95 miles in length.

SCE estimates that the existing 66 kV line from Rosamond Substation to the corner of Sopp Road and Division Street would need to be reconductored (totaling approximately 13 miles), with all existing transmission poles requiring replacement with new poles installed for the section from the corner of Sopp Road and Division Street to the project site. SCE estimates that reconductoring would require the installation of 300 new poles and the removal of 275 existing poles.

The fiber-optic (telecommunication) line would tie-in to the existing telecommunications line from approximately Tehachapi Willow Springs Road following the route of Backus Road and routing around the north side of Exit 61 of State Route 14 to the Sierra Highway. The new fiber optic line would be installed on 18 new poles from Backus Road/Sierra Highway to the project site and would be approximately 1 mile in length. **Figure 1**, Existing and Proposed SCE Improvements, shows the location of the existing and proposed new power and telecommunication lines in relation to the proposed Micro Mill.



SOURCE: ESA, 2023

Mojave Micro Mill Project - Pacific Steel

Figure 1
Existing and Proposed
SCE Improvements

ESA

Regulatory Framework

A number of statutes, regulations, plans, and policies have been adopted that address greenhouse gas (GHG) and energy applicable to the proposed Micro Mill. An abbreviated list of such statutes, regulations, plans, and polices is provided below:

Federal

- Light-Duty Vehicle Greenhous Gas and Corporate Average Fuel Economy Standards – U.S. Environmental Protection Agency (USEPA)
- Heavy-Duty Engines and Vehicle Fuel Efficiency Standards – USEPA
- Increase supply of alternative fuels, set standards for regional efficiency for heating and cooling, energy conservation, energy efficiency, and energy labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency and home appliances – Energy Independence and Security Act
- Achieve 100 percent carbon pollution-free electricity by 2035, support efficiency upgrades and electrification of building, reduce carbon pollution from transportation sector, reduce emissions from forests and agriculture and enhance carbon sinks, address carbon pollution from industrial processes, reduce non-CO2 GHGs, and other potent short-lived climate pollutants, and invest in innovation of affordable, reliable, and resilient clean technologies and infrastructure – Paris Agreement

State

- Assembly Bill (AB) 32 and Senate Bill (SB) 32 – California Air Resources Board (CARB)
- 2022 Scoping Plan for Achieving Carbon Neutrality – CARB
- California Climate Crisis Act (AB 1279) establishes the policy of the state to achieve net zero GHG emissions, carbon neutrality, as soon as possible, but no later than 2045 and achieve and maintain net negative GHG emissions thereafter– CARB
- Advanced Clean Cars Program and Advanced Clean Cars II Program – CARB
- Airborne Toxic Control Measure – CARB
- Truck and Bus Regulations – CARB
- Cap-and-Trade Program – CARB
- Emission Standards for off-road diesel construction equipment of greater than 25 horsepower – CARB
- California Energy Commission's California Green Building Standards (CALGreen) Code – California Energy Commission

Regional

- Kern Council of Governments' 2022 Regional Transportation Plan and Sustainable Communities Strategy (2022 RTP/SCS) – Kern County of Governments

- Addendum to CEQA Guidelines Addressing GHG Emission Impacts from Stationary Source Project Under CEQA When Serving as the Lead Agency– Eastern Kern Air Pollution Control District

Local

- Kern County General Plan Land Use, Open Space, and Conservation Element and Energy Element – Solar Energy Development – Kern County Planning Department

A full description of the above statues, regulations, plans, and policies are included in Section 2 of ESA's *Mojave Micro Mill Project, Greenhouse Gas and Energy Technical Report*, January 2023.

Methodology

The methodology to evaluate the power and telecommunication line construction and operational GHG emissions energy impacts has been conducted as follows. Detailed modeling calculations are provided in **Exhibit A** of this memorandum.

Power & Telecommunication Line Emissions

The construction and operational GHG emissions and energy consumption were estimated from several emission models, emissions factors, and references, depending on the source type and data availability. Impacts were quantitatively assessed using conservative assumptions and the following resources:

- Construction equipment horsepower, load factors, and emission factors from the *California Emissions Estimator Model* (CalEEMod) model, version 2020.4.0[1].
- Vehicle emission factors using EMFAC2021.
- Mojave Micro Mill Project, Greenhouse Gas Technical Report, January 2023.
- California Public Utilities Commission, Circle City Substation and Mira Loma-Jefferson 66 kV line Project, May 2018.

GHG

Construction Emissions

Construction and installation of the power and telecommunication lines would generate temporary GHG emissions through the use of heavy-duty construction equipment, such as boom/crane truck, line puller, and loaders, and through worker vehicle trips and haul trucks traveling to and from the project site. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of construction activity, and prevailing weather conditions. The majority of construction activities would be completed in a linear fashion and would not expose any one area for a long period of time.

At the time this memorandum was developed, Southern California Edison (SCE), the utility provider for the project site, had not developed a construction plan for the construction and installation of power and

[1] A newer version of CalEEmod is available, however to be consistent with the Air Quality Technical Report completed for the proposed project, version 2020.4.0 was used to calculate the emissions for the power and telecommunication lines.

telecommunication connection lines for the Mojave Micro Mill project. The known information provided by SCE was the number of poles to be constructed (300) and the rate of pole construction (one pole per day), which was used to develop a construction schedule of approximately 300 days. In the absence of a specific construction plan for power and telecommunications construction, technical information from a similar SCE project, including construction equipment, duration, and phasing, were used to develop construction assumptions for the power and telecommunication lines necessary to serve the Mojave Micro Mill project.[2] The Circle City Substation and Mira Loma-Jefferson 66 KV Line Project (Circle City Project) was used as a project reference since the type of construction activities would be similar to those for the power and telecommunication connection lines for the Mojave Micro Mill Project. The Circle City Project is larger in linear feet, ground disturbance and overall construction activities than the power and telecommunication line for the Mojave Micro Mill Project. Detailed information provided in the technical appendices for the Circle City Project are publicly available and were analyzed to develop reasonably conservative and representative assumptions for this technical analysis. The Circle City Substation and Mira Loma-Jefferson 66 KV Line EIR can be found in **Exhibit A**.

Construction emissions are forecasted by assuming a conservative estimate of construction activities from each phase of the Project. Construction emissions are estimated using the CalEEMod (Version 2020.4.0), which is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions from a variety of land use projects. CalEEMod is based on outputs from OFFROAD and EMFAC, which are emissions estimation models developed by CARB and used to calculate emissions from construction activities, including off- and on-road vehicles. CalEEMod outputs for construction-related GHG emissions of CO_2, CH_4, and CO_2e are found in Exhibit B.

Operational Emissions

Although the power and telecommunication lines would convey electricity and data, they would not generate GHG emissions directly. During operation of the power and telecommunication lines, minimal amounts of emissions could be generated from indirect activities including periodic inspections and maintenance. Typical operational maintenance activities of power and telecommunication lines would include the use of service vehicles traveling on existing access roads. Thus, operational emissions would be generated from vehicle trips by worker staff for periodic inspections and maintenance purposes. The project would result in limited lengths of new power and telecommunication lines. The proposed new 66 kV power line would be approximately 0.95 miles in length and the proposed new telecommunication line would be approximately 1 mile in length. The reconductoring of the existing 66 kV line would be approximately 13 miles in length, however, as an existing line, this segment is already part of an existing inspection and maintenance schedule. Operational inspection and maintenance activities for the new power and telecommunication lines would be conducted as part of the overall inspection and maintenance activities of the existing lines. Thus, the net change in operational inspection and maintenance emissions from the project's new power and telecommunication lines would be minimal and are addressed qualitatively.

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[2] California Public Utilities Commission, Circle City Substation and Mira Loma-Jefferson 66 kV line Project, March 2016. Available at SCE's Circle City Substation and Mira Loma-Jefferson 66 kV Subtransmission Line Project (A.15-12-007): Home (ca.gov)

Energy

Construction

Construction and installation of the power and telecommunication lines would be implemented in subphases as discussed above in the GHG section. Construction and installation of the power and telecommunication lines would consume energy primarily from transportation fuels (e.g., diesel and gasoline) used for haul trucks, heavy-duty construction equipment, and construction workers traveling to and from the project site. This analysis considers these factors and provides the estimated maximum construction energy consumption for the purposes of evaluating the associated impacts on energy resources. As with GHG, the Circle City project was used as a project reference since the type of construction activities would be similar to those for the power and telecommunication connection lines for the Mojave Micro Mill Project.

Construction electricity was estimated for the energy consumed off-site related to treatment and conveyance of water to the project site for dust control. Default CalEEMod water electricity intensity factors were used to convert the volume of water needed to electricity demand from water conveyance. As with GHG, natural gas is not expected to be consumed during project construction. Therefore, natural gas associated with construction activities was not calculated.[3]

Fuel consumption from on-site heavy-duty construction equipment was calculated based on the equipment mix and usage factors provided in the CalEEMod construction output files included in Exhibit B. The construction equipment and haul trucks would likely be diesel-fueled, while the construction worker commute vehicles would primarily be gasoline-fueled. For the purposes of this assessment, it is conservatively assumed that all heavy-duty construction equipment and haul trucks would be diesel-fueled. The estimated fuel economy for heavy-duty construction equipment is based on fuel consumption factors from the CARB OFFROAD emissions model. The estimated fuel economy for haul trucks and worker commute vehicles is based on fuel consumption factors from the CARB EMFAC emissions model. Both OFFROAD and EMFAC are incorporated into CalEEMod. However, emissions for worker, vendor, and concrete/haul trucks were calculated outside of CalEEMod using emission factors from EMFAC2021 to provide a more detailed and accurate account of truck emissions. Refer to Exhibit B for detailed energy calculations.

Operational Emissions

As stated above, although the power and telecommunication lines would convey electricity and data, they would not generate GHG emissions directly. During operation of the power and telecommunication lines, minimal amounts of energy could be consumed from indirect activities including periodic inspections and maintenance. However, operational inspection and maintenance activities for the new power and telecommunication lines would be conducted as part of the overall inspection and maintenance activities of the existing lines. Thus, the net change in operational inspection and maintenance emissions from the project's new power and telecommunication lines would be minimal and are addressed qualitatively.

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[3] In general, natural gas would not be expected to be used and this energy analysis assumes heavy-duty construction equipment is diesel-fueled, as is typically the case. However, natural gas-fueled heavy-duty construction equipment could be used to replace some diesel-fueled heavy-duty construction equipment. If this does occur, diesel fuel demand would be slightly reduced and replaced by a small amount of temporary natural gas demand. This would not substantially affect the energy analysis or conclusions provided herein.

Thresholds of Significance

Greenhouse Gas Emissions Thresholds

The significance thresholds below are derived from the Environmental Checklist questions in Appendix G of the California Environmental Quality Act (CEQA) Guidelines. Accordingly, a significant impact associated with GHGs would occur if the project were to:

a) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or

b) Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.

The Eastern Kern Air Pollution Control District (EKAPCD) adopted quantitative thresholds for determining significance of GHG emissions for projects where EKAPCD is the CEQA lead agency. A project is considered to have a significant project and cumulatively considerable impact if it exceeds the following significance threshold:

- Generate 25,000 $MTCO_2e$/year.

The above significant impact would be reduced to less than a significant project impact and cumulatively considerable impact if it meets one of the following options:

1. Project demonstrates that it is in compliance with a state GHG reduction plan such as AB 32 or a federal GHG reduction plan if it is more stringent than the state plan.

2. Project GHG emissions will be mitigated to less than significant if GHGs can be reduced by at least 20 percent below Business-As-Usual through implementation of one or more of the following strategies:

    a. Compliance with a Best Performance Standard as set forth in Section IV of EKAPCD CEQA GHG Policy

    b. Compliance with GHG Offset as detailed in Section IV of EKAPCD CEQA GHG Policy

    c. Compliance with Alternative GHG Reduction Strategy as discussed in Section IV of EKAPCD CEQA GHG Policy

Energy Thresholds

According to the State CEQA Guidelines Appendix G, the project could have a potentially significant impact with respect to energy if it would:

a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Environmental Impacts

Greenhouse Gas Emissions

Impact 1 – A significant impact would occur if the project would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

Impact 2 – A significant impact would occur if the project would conflict with any applicable plan, policy, regulation, or recommendation of an agency adopted for the purpose of reducing the emissions of GHGs.

Construction Emissions

Proposed Micro Mill

As stated in the Greenhouse Gas and Energy Technical Report, the proposed Micro Mill is considered to have a significant project and cumulatively considerable impact because GHG emissions would exceed the EKAPCD significance threshold. This significant impact would be reduced to a less-than-significant impact and less than cumulatively considerable impact by complying with a state GHG reduction plan such as the Cap-and-Trade Program. Under the Cap-and-Trade Program, the Applicant would reduce GHG emissions through buying or trading credits and/or additional GHG offsets. In addition, the proposed Micro Mill would comply with relevant goals and actions to reduce project emissions as feasibly possible and not conflict with the Health and Safety Code Division 25.5 goals and CARB guidelines for assessing GHG emissions. Given the proposed Micro Mill's GHG emissions efficiency and the proposed Micro Mill's consistency analysis with applicable GHG plans, policies, and regulations adopted for the purpose of reducing GHG emissions, impacts regarding GHG emissions and reduction plans the proposed Micro Mill would be less than significant. A complete discussion regarding the proposed Micro Mill's consistency with the applicable GHG plans, policies, and regulations can be found in the Greenhouse Gas and Energy Technical Report.

Power and Telecommunication Lines

Construction of the power and telecommunication lines would result in the temporary addition of GHG emissions from off-road construction equipment, such as boom/crane trucks, line pullers, and loaders and on-road vendor trucks, and worker vehicle trips. Construction emissions for the power and telecommunication lines were estimated from construction activities generated from off-road construction equipment and emission factors and methodologies from CalEEMod and EMFAC2021. Construction schedule details, including phase type, duration, and sequencing, were based on information provided by SCE and the Circle City Project to represent a conservative yet reasonable scenario based on the best information available. Default values provided in CalEEMod were used where detailed project information was not available.

Project construction of the power and telecommunication lines are conservatively assumed to start as early as the first quarter of 2024. The GHG emissions associated with construction and installation of the power and telecommunication lines were calculated for each year of construction activity. Results of the project's construction phase GHG emissions calculations are presented in **Table 1**, *Project Construction Greenhouse Gas Emissions*. Although construction-related GHGs are short-term emissions, any assessment of project emissions should include construction emissions. The Association of Environmental Professionals (AEP) recommends that total construction GHG emissions resulting from a project be amortized over the project's estimated lifetime and

added to GHG emissions,[4] so that GHG reduction measures will address construction GHG emissions as part of the operational GHG reduction strategies.

As indicated in Table 1, construction emissions during the construction period of the power and telecommunications lines would generate an estimated 1,766 $MTCO_2e$, or 58.9 $MTCO_2e$ amortized over a 30-year period. This is lower than the proposed Micro Mill, which is expected to generate approximately 38,575 $MTCO_2e$ or 1,286 $MTCO_2e$ amortized over a 30-year period. A complete listing of the equipment by phase, emission factors, and calculation parameters used in this analysis is included within the emissions calculation worksheets that are provided in Exhibit B to this report.

TABLE 1
PROJECT CONSTRUCTION GREENHOUSE GAS EMISSIONS

Emission Source	CO_2e (Metric Tons)[a,b]
Power Transmission Lines	
2024	1,135
2025	206.7
Telecommunication Line	
2024	363.7
2025	61.0
Total Construction Emissions	**1,766**
Amortized Construction Emissions (30 years)	**58.9**
Total Emissions (Micro Mill Project and Power and Telecommunication Lines)	**40,341**
Amortized Construction Emissions (30 years) (Micro Mill Project and Power and Telecommunication Lines)	**1,345**

[a] Totals may not add up exactly due to rounding in the modeling calculations Detailed emissions calculations are provided in Exhibit B.

[b] CO_2e emissions are calculated using the GWP values from the IPCC Fourth Assessment Report.

SOURCE: ESA 2023.

Operational Emissions

Proposed Micro Mill

As discussed in the Greenhouse Gas and Energy Technical Report, operation and maintenance of the proposed Micro Mill would generate GHG emissions largely through the manufacturing process (i.e., electric furnace, ladle cooling towers, fire pumps, emergency generators, fuel tanks, etc.), motor vehicle trips to and from the project site; on-site maintenance activities; and energy use (i.e., electricity). Water conveyance and treatment, and waste sources were calculated for the expected first operating year, of 2025. The proposed Micro Mill would result in a significant project and cumulatively considerable impact because its GHG emissions would exceed the EKAPCD significance threshold of 25,000 $MTCO_2e$ per year.

[4] Association of Environmental Professionals (AEP), *Final White Paper Beyond 2020 and Newhall: A Field Guide t New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California*, October 29, 2016. https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf. Accessed October 2022.

However, the proposed Micro Mill's impacts were determined to be less than significant because the proposed Micro Mill would be in compliance with a state GHG reduction plan such as the Cap-and-Trade Program. Under the Cap-and-Trade Program, the Applicant would reduce GHG emissions through buying or trading credits and/or additional GHG offsets. The proposed Micro Mill's emissions trajectory is expected to follow a declining trend, consistent with the establishment of the 2030 and 2045 targets established by SB 32, AB 1279, and the 2022 Scoping Plan. Therefore, impacts regarding GHG emissions and reduction plans would be less than significant.

Power and Telecommunication Lines

Although the power and telecommunication lines would convey electricity and data, they would not generate GHG emissions directly. As discussed in the Greenhouse Gas and Energy Technical Report, substations may feature circuit breakers that contain SF6 gas, used as an insulator and an arc suppressor in the breakers. SF6 is inert, non-toxic, and is encapsulated in the breaker assembly. SF6 is a GHG with substantial global warming potential because of its chemical nature and long residency time within the atmosphere. However, under normal conditions, it would be completely contained in the equipment and SF6 would be released only in the unlikely event of a failure, leak, or crack in the circuit breaker housing. New circuit breaker designs have been developed to minimize the potential for leakage, compared to that of past designs, and the amount of SF6 that could be released by the solar facility equipment would be minimal.

Long-term operation of the power and telecommunication lines would not result in direct emissions of GHGs. Rather, during operation of the power and telecommunication lines, minimal amounts of emissions could be generated from periodic inspections and maintenance operations. Typical operational maintenance activities of power and telecommunication lines would include the use of service vehicles traveling on existing access roads. Thus, operational emissions would be generated from vehicle trips by worker staff for periodic inspections and maintenance purposes. The project would result in limited lengths of new power and telecommunications lines. The proposed new 66 kV power line would be approximately 0.95 miles in length and the proposed new telecommunication line would be approximately 1 mile in length. The reconductoring of the existing 66 kV line would be approximately 13 miles in length, however, as an existing line, this segment is already part of an existing inspection and maintenance schedule. Operational inspection and maintenance activities for the new power and telecommunication lines would be conducted as part of the overall inspection and maintenance activities of the existing lines. Thus, the net change in operational inspection and maintenance emissions from the project's new power and telecommunication lines would be minimal and are addressed qualitatively.

As demonstrated in Table 1 above, the power and telecommunication lines construction emissions would be 1,766 $MTCO_2e$, or 58.9 $MTCO_2e$ amortized over a 30-year period, and would be significantly lower than the GHG emissions for the proposed Micro Mill. Therefore, the power and telecommunication lines would not result in a substantial increase compared to those identified in the Greenhouse Gas and Energy Technical Report, and impacts would be less than significant.

Energy Emissions

Impact 1 - Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.

Construction

Proposed Micro Mill

As discussed in the Greenhouse Gas and Energy Technical Report, during construction of the proposed Micro Mill, energy would be consumed in the form of electricity for powering the construction trailers (lights, electronic equipment, and heating and cooling) and exterior uses, such as lights, water conveyance for dust control, and other construction activities. Natural gas would not be used for construction purposes. Project construction would also consume energy in the form of petroleum-based fuels associated with the use of off-road construction vehicles and equipment on the project site, construction workers' travel to and from the project site, and delivery and haul truck trips (e.g., hauling of demolition material to off-site reuse and disposal facilities).

Construction would use energy only for necessary on-site activities and to transport construction materials, excavated fill, and demolition debris to and from the project site. Idling restrictions and the use of cleaner, energy-efficient equipment would result in less fuel combustion and energy consumption and, thus, reduce the proposed Micro Mill's construction-related energy use. Therefore, the proposed Micro Mill would not result in the wasteful, inefficient, and unnecessary consumption of energy and impacts associated with transportation fuels for construction would be less than significant**.**

Power and Telecommunication Lines

Energy for the construction of the power and telecommunication lines would be consumed in the form of electricity for water conveyance for dust control. As with the proposed Micro Mill, natural gas would not be used for the construction and installation of the power and telecommunication lines. Petroleum-based fuels would also be consumed during the construction/installation of the power and telecommunication lines with the use of off-road construction vehicles and equipment, construction workers traveling to and from the project site, and delivery truck trips. **Table 2,** *Power & Telecommunication Line Construction Energy Usage*, provides a summary of the annual average electricity, gasoline, and diesel fuel estimated to be consumed during construction of the power and telecommunication lines.

TABLE 2
POWER & TELECOMMUNICATION LINE CONSTRUCTION ENERGY USAGE

Energy Type	Total Quantity [b]	Annual Average Quantity During Construction [b c]
Water Conveyance for Dust Control	26,777 kWh	23,438 kWh
Total Electricity	**26,777 kWh**	**23,438 kWh**
Gasoline		
On-Road Construction Equipment	8,165 gallons	7,147 gallons
Total Gasoline	**8,165 gallons**	**7,147 gallons**
Diesel		
On-Road Construction Equipment	7,434 gallons	6,507 gallons
Off-Road Construction Equipment	175,612 gallons	153,713 gallons
Total Diesel	**183,046 gallons**	**160,220 gallons**

kWh = kilowatt-hours

[a] Detailed calculations are provided in Exhibit B to this Memorandum.
[b] Totals may not add up due to rounding of decimals.
[c] Fuel totals include water line construction and traffic improvements that occur in 2024 and 2025. Traffic improvements occurring in 2041 would last less than 20 days and fuel consumption would be negligible.

SOURCE: ESA 2023.

Electricity

Annual average construction electricity usage associated with the construction and installation of the power and telecommunication lines would be approximately 23,438 kWh (or 2.34 MWh). For comparison, the annual electricity consumed by the proposed Micro Mill would be approximately 1,070,000 kWh (or 1,070 MWh). The electricity demand for the power and telecommunication lines would be significantly lower than the proposed Micro Mill and within the supply and infrastructure capabilities of SCE (which reported 82,048 GWh of total energy sales in 2021).[5]

Transportation Energy

During the construction/installation of the power and telecommunication line, on- and off-road vehicles would consume an estimated annual average of approximately 7,147 gallons of gasoline fuel and approximately 160,220 gallons of diesel fuel. For comparison, the annual gasoline fuel consumption for the proposed Micro Mill is approximately 236,090 gallons and the annual diesel fuel consumption is approximately 1,934,582 gallons. Construction/installation of the power and telecommunication lines would use fuel-efficient trucks and equipment consistent with federal and State regulations, such as fuel efficiency regulations in accordance with CARB's Pavley Phase I and II standards and the revised SAFE Vehicles Rule; the anti-idling regulation in accordance with California Code of Regulations (CCR), Title 13, Section 2485; and fuel requirements in accordance with CCR, Title 17, Section 93115, as well as the In-Use Off-Road Diesel-Fueled Fleets regulation.[6] As such,

[5] SCE, *2021 Annual Report*, February 24, 2022. https://www.edison.com/content/dam/eix/documents/investors/sec-filings-financials/2021-eix-sce-annual-report.pdf. Accessed October 2021.

[6] CARB, In-Use Off-Road Diesel-Fueled Fleets Regulation, 2022. https://ww2.arb.ca.gov/our-work/programs/use-road-diesel-fueled-fleets-regulation. Accessed October 2022.

construction/installation of the power and telecommunication lines would comply with State measures to reduce inefficient, wasteful, and unnecessary consumption of energy, such as petroleum-based transportation fuels. While these regulations are intended to reduce construction emissions, compliance with the anti-idling and emissions regulations discussed above would also result in fuel savings from the use of more fuel-efficient engines.

Based on the analysis above, construction/installation of the power and telecommunication lines would use energy only for necessary on-site activities and to transport construction materials to and from the project site. Idling restrictions and the use of cleaner, energy-efficient equipment would result in less fuel combustion and energy consumption and would thus reduce construction-related energy use. Therefore, the construction associated with the power and telecommunication lines would not result in the wasteful, inefficient, and unnecessary consumption of energy, and impacts associated with transportation fuels for construction would not result in a substantial increase compared to those identified in the Greenhouse Gas and Energy Technical Report and impacts would remain less than significant.

Operations

Proposed Micro Mill

As stated in the Greenhouse Gas and Energy Technical Report, during operation of the proposed Micro Mill, energy would be consumed for multiple purposes, including, but not limited to, the manufacturing of rebar (micro mill), HVAC, refrigeration, lighting, and the use of electronics, equipment, and appliances. Energy would also be consumed during project operations related to water usage, solid waste disposal, and vehicle trips. The proposed Micro Mill's features would support and promote the use of renewable energy through the implementation of the solar array to power the electric arc furnace and ladle metallurgy station, would result in energy efficiency through compliance with CALGreen and Title 24 requirements, and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Therefore, the proposed Micro Mill impacts would be less than significant.

Power and Telecommunication Lines

Although the power and telecommunication lines would convey electricity, they would not directly consume electricity. Long-term operation of the power and telecommunication lines would not result in direct consumption of energy. During operation of the power and telecommunication lines, minimal amounts of emissions would be generated from periodic inspections and maintenance operations. Operational inspection and maintenance activities of the new power and telecommunication lines would be conducted using service vehicles traveling on existing access roads with no surface disturbance. In addition, operational inspection and maintenance activities for the new power and telecommunication lines would be included with current inspection and maintenance activities for the existing lines and conducted by existing employees. The project's new power and telecommunication lines would not require an increase in inspection and maintenance employees. As a result, minimal energy consumption of petroleum-fueled vehicles from vehicle trips would occur from the new lines.

Therefore, operations associated with the power and telecommunication lines would not result in the wasteful, inefficient, and unnecessary consumption of energy and impacts associated with transportation fuels would not result in a substantial increase compared to those identified in the GHG and Energy Technical Report and impacts would remain less than significant.

Impact 2 – Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Construction

Proposed Micro Mill

As discussed in the Greenhouse Gas and Energy Technical Report, the proposed Micro Mill's construction equipment usage would be consistent with the energy standards applicable to construction equipment, including limiting idling fuel consumption and using contractors that comply with applicable CARB regulatory standards that affect energy efficiency. Therefore, the proposed Micro Mill would comply with existing energy standards and impacts would be less than significant.

Power and Telecommunication Lines

As with the proposed Micro Mill, the construction equipment used for the power and telecommunication lines would be consistent with the energy standards applicable to construction equipment, including limiting idling fuel consumption and using contractors that comply with applicable CARB regulatory standards that affect energy efficiency. Therefore, the construction and installation of the power and telecommunication lines would comply with existing energy standards and impacts would be less than significant.

Operations

Proposed Micro Mill

The proposed Micro Mill would be designed in a manner that is consistent with relevant energy conservation plans designed to encourage development that results in the efficient use of energy resources. The proposed Micro Mill would comply with the CALGreen, and Title 24, which would be consistent with the County's Green Building Standards. The proposed Micro Mill would comply with Corporate Average Fuel Economy (CAFE) standards and the Pavley Standards, which are designed to result in more efficient use of transportation fuels. The proposed Micro Mill would reduce overall vehicle miles traveled (VMT) for trucks versus not siting the proposed Micro Mill in California. Overall, the proposed Micro Mill's features would support and promote the use of renewable energy and energy efficiency through compliance with CALGreen and Title 24 requirements and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Therefore, the proposed Micro Mill impacts would be less than significant.

Power and Telecommunication Lines

The addition of the power and telecommunication lines would result in a minimal increase in operation-related vehicle trips from periodic inspections and maintenance operations and would not result in unplanned growth in VMT and thus would not result in adverse impacts to transportation energy consumption. The power and telecommunication lines would also implement vehicle standards, like the CAFE standards and the Pavley Standards, which are designed to result in more efficient use of transportation fuels.

CARB has outlined a number of potential strategies for achieving energy consumption reduction goals. Although the power and telecommunication lines would convey electricity, they would not consume electricity. The potential strategies include reducing petroleum use in cars and trucks and reducing the carbon content of transportation fuels. The project would comply with these future regulations, as promulgated by the U.S. Environmental Protection Agency and CARB. Therefore, the operational impacts from the power and telecommunication line

would not result in a substantial increase compared to those identified in the Greenhouse Gas and Energy Technical Report and would be less than significant.

Exhibit A

CIRCLE CITY SUBSTATION AND MIRA LOMA-JEFFERSON 66 KV SUBTRANSMISSION LINE PROJECT

Draft Environmental Impact Report
SCH Number 2016021012

Prepared for
California Public Utilities Commission

May 2018



CIRCLE CITY SUBSTATION AND MIRA LOMA-JEFFERSON 66 KV SUBTRANSMISSION LINE PROJECT

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Prepared for
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May 2018

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4.6 Energy Conservation

This section identifies and evaluates issues related to energy conservation in the context of the Project and alternatives. Discussed are the physical and regulatory setting; the criteria used for determining the significance of environmental impacts; impacts associated with construction, operation, and maintenance of the Project; and feasible mitigation measures to reduce or avoid significant effects.

4.6.1 Setting

4.6.1.1 Regional and Local Setting

California's energy system includes electricity, natural gas, and petroleum. According to the California Energy Commission (CEC), California's energy system generates 66 percent of the electricity, 10 percent of the natural gas, and 36 percent of the petroleum consumed or used in the state. The rest of the state's energy and energy sources are imported, and include electricity from the Pacific Northwest and the Southwest; natural gas purchases from Canada, the Rocky Mountain states, and the southwest; and petroleum imported from Alaska and foreign sources (CEC, 2016a; 2016b; and 2016c; EIA, 2017).

Electricity

The production of electricity requires the consumption or conversion of energy resources including natural gas, coal, water, nuclear, and renewable sources such as wind, solar, and geothermal. Of the electricity generated in California, 59.9 percent is generated by natural gas-fired power plants, 0.3 percent is generated by coal-fired power plants, 5.9 percent comes from large hydroelectric dams, and 9.4 percent comes from nuclear power plants. The remaining 24.5 percent in-state total electricity production is supplied by renewable sources including solar, biomass, geothermal, small hydro, and wind power (CEC, 2016a). Electricity is distributed via a network of high-voltage transmission lines commonly referred to as the power grid.

Southern California Edison (SCE) is the local public utility and energy supplier in the proposed Project area, and produces and purchases electricity from both renewable and nonrenewable resources. SCE serves approximately 14 million people in a 50,000-square-mile area of central, coastal, and Southern California (including Fresno, Imperial, Inyo, Kern, Kings, Los Angeles, Madera, Mono, Orange, Riverside, Santa Barbara, San Bernardino, Tulare, Tuolumne, and Ventura counties) (SCE, 2016).

Gasoline

Gasoline is by far the largest transportation fuel by volume used in California. Nearly all of the gasoline used in California is obtained through the retail market. In 2016, approximately 15.5 billion gallons of gasoline were sold in California's retail market (California Department of Tax and Fee Administration, 2017). The total 2015 sales of gasoline in Riverside and San Bernardino counties were 1,039 million and 909 million gallons, respectively (CEC, 2017a).

Diesel

Diesel fuel is the second largest transportation fuel by volume used in California behind gasoline. It is estimated that approximately 53 percent of total diesel sales in California are associated with retail sales. In 2015, 4.2 billion gallons of diesel were sold in California (CEC, 2017b). According to the U.S. Department of Energy's Energy Information Administration, nearly all semi-trucks, delivery vehicles, buses, trains, ships, boats and barges, and farm, construction, and military vehicles and equipment have diesel engines. In 2015, retail sales of diesel fuel in Riverside and San Bernardino counties were 146 million and 241 million gallons, respectively (CEC, 2017a).

4.6.1.2 Regulatory Setting

Federal

Energy Policy Act of 2005

The Energy Policy Act of 2005 seeks to reduce reliance on non-renewable energy resources and provide incentives to reduce current demand on these resources. For example, under this act, consumers and businesses can obtain federal tax credits for purchasing fuel-efficient appliances and products, including buying hybrid vehicles, building energy-efficient buildings, and improving the energy efficiency of commercial buildings. Additionally, tax credits are available for the installation of qualified fuel cells, stationary microturbine power plants, and solar power equipment.

State

State of California Integrated Energy Policy

In 2002, the Legislature passed Senate Bill 1389, which required the CEC to develop an integrated energy plan every two years for electricity, natural gas, and transportation fuels, for the California Energy Policy Report. The plan calls for the state to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for Zero Emission Vehicles and their infrastructure needs, and encouragement of urban designs that reduce vehicle miles traveled and accommodate pedestrian and bicycle access.

The CEC has adopted the 2015 Integrated Energy Policy Report, which assesses major energy trends and issues facing the state's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources, protect the environment, ensure reliable, secure, and diverse energy supplies, enhance the state's economy, and protect public health and safety. The 2015 Integrated Energy Policy Report covers a broad range of topics, including energy efficiency, building energy efficiency standards, achieving 50 percent renewables by 2030, and the California Energy Demand Forecast (CEC, 2016d).

Title 24 Building Energy Efficiency Standards

Title 24, Part 6, of the California Code of Regulations (CCR) is the California Building Code governing all aspects of building construction. Included in Part 6 of the Code are standards mandating energy efficiency measures in new construction. Since its establishment in 1977, the

building efficiency standards (along with standards for energy efficiency in appliances) have contributed to a reduction in electricity and natural gas usage and costs in California. The standards are updated every 3 years to incorporate new energy efficiency technologies. The latest update to the Title 24 standards became effective July 2014. The standards regulate energy consumed in buildings for heating, cooling, ventilation, water heating, and lighting. Title 24 is implemented through the local planning and permits processes (CEC, 2013).

Renewable Portfolio Standard

Senate Bill 1078 (SB 1078) (Chapter 516, Statutes of 2002) requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2017. SB 107 (Chapter 464, Statutes of 2006) changed the target date to 2010. In November 2008, the Governor signed Executive Order S-14-08, which expanded the State's Renewable (Energy) Portfolio Standard (RPS) to 33 percent renewable power by 2020. On September 15, 2009, the Governor issued Executive Order S-21-09 requiring the California Air Resources Board (CARB), under its AB 32 authority, to adopt regulations to meet a 33 percent RPS target by 2020. The CARB regulations use a phased-in or tiered requirement to increase the amount of electricity from eligible renewable sources over an 8-year period that began in 2012. CARB adopted the regulations in September 2010.

In March 2011, the Legislature passed SB X1-2, which was signed into law by the Governor the following Month. SB X1-2 requires utilities to procure renewable energy products equal to 33 percent of retail sales by December 31, 2020, and also established interim targets: 20 percent by December 31, 2013, and 25 percent by December 31, 2016. Senate Bill 350 (SB 350) of 2015 (Chapter 547, Statutes of 2015) increased the RPS to 50 percent by the year 2030.

SB 350

SB 350 of 2015 (Chapter 547, Statutes of 2015) revises the state's RPS Program by requiring utilities to procure at least 50 percent of the retail electricity from renewable sources by 2030. The law also requires the California Energy Commission to establish annual energy efficiency standards designed to double the electricity and natural gas savings for existing buildings by 2030.

Construction Equipment Idling

CARB has also adopted a regulation (13 Cal. Code Regs. Section 2449 et seq.) for in-use off-road diesel vehicles that is designed to reduce emissions from diesel-powered construction and mining vehicles by imposing idling limitations on owners, operators, renters, or lessees of off-road diesel vehicles. The regulation requires an operator of applicable off-road vehicles (self-propelled diesel-fueled vehicles 25 horsepower and up that were not designed to be driven on-road) to limit idling to no more than 5 minutes.

Local

California Public Utilities Commission (CPUC) General Order No. 131-D explains that local land use regulations would not apply to the Project. However, for informational purposes, the policies of local general plans and other planning documents pertaining to energy conservation that otherwise may be relevant to the Project and alternatives are described below.

City of Chino

The following Open Space and Conservation Element policy of the City of Chino General Plan regarding energy conservation may be applicable to Project activities that take place within Chino (City of Chino, 2010).

> *Policy P2*: The City shall collaborate with local energy suppliers and distributors to establish energy conservation programs, Energy Star® appliance change-out programs, rebates, vouchers, and other incentives to install energy-efficient technology and products.

City of Corona

The following Infrastructure and Public Services Element policies of the City of Corona General Plan regarding energy conservation may be applicable to Project activities that take place within Corona (City of Corona, 2004).

> *Policy 7.11.3*: Coordinate with the Southern California Gas Company to ensure that their newly developed facilities are designed and sited to be compatible with adjacent land uses in the City of Corona.
>
> *Policy 7.12.2*: Work with the SOCAL Gas, SCE, and the City Department of Power and Water to ensure that adequate electrical facilities are available to meet the demand of existing and future developments.
>
> *Policy 7.12.3*: Continue to provide for the undergrounding of new and existing electrical distribution lines unless it is determined not to be economically or practically feasible as a result of significant environmental or other constraints.

City of Eastvale

The following Circulation and Infrastructure Element and the Air Quality and Conservation Element policies of the City of Eastvale General Plan regarding energy conservation may be applicable to Project activities that take place within Eastvale (City of Eastvale, 2012).

> *Policy C-28*: Promote and encourage efficient provisions of utilities such as water, wastewater, natural gas, and electricity that support the [General Plan] Land Use Map.
>
> *Policy C-29*: Locate new and relocated utilities underground when possible. All remaining utilities shall be located or screened in a manner that minimizes their visibility by the public.
>
> *Policy AQ-36*: The City shall support the inclusion of energy-efficient design and renewable energy technologies in public and private projects.

City of Ontario

The following Environmental Resources Element policy of the City of Ontario General Plan pertains to energy conservation (City of Ontario, 2010).

> *Policy ER3-1*: Conservation Strategy. We require conservation as the first strategy to be employed to meet applicable energy-saving standards.

4.6.2 Significance Criteria

Appendix F of the CEQA *Guidelines* provides guidance for assessing energy impacts of projects. The appendix provides three goals:

- Decreasing overall per capita energy consumption;
- Decreasing reliance on natural gas and oil; and
- Increasing reliance on renewable energy sources.

Consistent with Appendix F, the Project would have a significant impact if it would:

a) Result in the inefficient use of energy during Project construction, operation, or maintenance;

b) Affect local and regional energy supplies to the point that additional capacity of those energy supplies would be required;

c) Adversely affect peak and base period demands for electricity and other forms of energy;

d) Conflict with existing energy standards;

e) Adversely affect energy resources; and/or

f) Result in substantial transportation energy use requirements with no efficient transportation alternatives.

4.6.3 Applicant Proposed Measures

No applicant proposed measures have been identified by SCE to reduce project impacts related to energy conservation.

4.6.4 Impacts and Mitigation Measures

4.6.4.1 Approach to Analysis

This analysis is based, in part, on basic assumptions regarding construction-related diesel and gasoline consumption for the proposed Project, and estimates of the operational energy requirements of the proposed Project. The analysis focuses on the anticipated energy demand and energy efficiency of the proposed Project as a whole, including during construction, operation, and maintenance, and decommissioning of the proposed facilities. In addressing the impact types listed in Section 4.6.2, the analysis also addresses whether the Project would result in the wasteful, inefficient, and unnecessary consumption of energy during construction or operation.

Off-road equipment inventories and construction and operation activity assumptions identified in SCE's air emission estimates were used by the CPUC's consultant (Environmental Science Associates [ESA]) to estimate fuel amounts that would consumed by off-road equipment during construction and operation of the Project. Fuel consumption factors for off-road equipment were derived from equipment inventory data using CARB's off-road emissions inventory database. Fuel use estimates for worker commuting and truck hauling during Project construction and operation were also estimated using trip data projected for the Project (see **Appendix D.4** for all fuel consumption factors and assumptions).

a) Result in the inefficient use of energy during Project construction, operation, or maintenance.

f) Result in substantial transportation energy use requirements with no efficient transportation alternatives.

Impact 4.6-1: Construction, operation, and maintenance would result in the consumption of energy. *Less than significant with mitigation* (Class II)

Construction-related energy expenditures would include both direct and indirect uses of energy, primarily in the form of diesel and gasoline fuel. Direct energy use would include the consumption of petroleum for operation of construction vehicles and equipment and the use of electricity as a temporary power source at the proposed construction staging yards. Indirect energy use includes the energy required to make the materials and components used during construction. This includes energy used for extraction of raw materials, manufacturing, and transportation associated with manufacturing.

Regarding construction-related direct energy consumption, it is estimated that off-road construction equipment would operate for a total of approximately 40,000 hours and would consume a total of approximately 172,000 gallons of diesel fuel at an average rate of 4.5 gallons per hour. With regard to vehicle use during construction, workers' vehicles would travel over 1,013,000 miles and would consume approximately 46,067 gallons of gasoline (assuming an average fuel economy of 22 miles per gallon) and heavy haul trucks would travel approximately 310,000 miles and consume approximately 52,000 gallons of diesel fuel (assuming an average consumption rate of 6.0 miles per gallon) (see Appendix D.4 for all assumptions and fuel use factors). When averaged over the 1.5-year construction period, the maximum annual fuel use for off-road construction equipment would be approximately 115,000 gallons of diesel fuel per year, construction workers' personal vehicles would consume approximately 31,000 gallons of gasoline per year, and heavy haul trucks would consume approximately 34,000 gallons of diesel fuel per year. The total average annual fuel use during the 1.5-year construction period would be approximately 31,000 gallons per year of gasoline and approximately 149,000 gallons per year of diesel fuel.

These annual average gasoline use amounts are equivalent to less than 0.01 percent of the total gasoline fuel sold in Riverside or San Bernardino County, and the annual average diesel use amounts are equivalent to 0.10 percent and 0.06 percent diesel fuel sold in Riverside and San Bernardino counties, respectively (see Section 4.6.1, *Setting*).

The amount of electricity that would be consumed during Project construction is likely to be minor, but cannot be estimated as it would be too speculative given existing data.

While the overall transportation energy use requirements would not be significant relative to the overall sales of transportation fuels in the Project area counties, construction activities could result in wasteful or inefficient use of energy if, for example, construction equipment is not well maintained, or if haul trips are not planned efficiently. (See Impact 4.6-2 for a further discussion of construction energy impacts.) For all Project components, the potential for construction activities to use large amounts of fuel or energy in a wasteful or inefficient manner is considered a significant impact. However, with implementation of **Mitigation Measures 4.6-1 (Construction Equipment**

Efficiency Plan), which would ensure construction activities are conducted in a fuel-efficient manner, the impact would be reduced to a less-than-significant level.

During Project operation and maintenance, energy use would be minor and would be limited to the requirement of up to 10 maintenance trips per day. Operation and maintenance activities would originate from the local area because current local SCE personnel would perform this work. The operational impact would be less than significant.

> **Mitigation Measure 4.6-1:** SCE shall contract a qualified professional (i.e., construction planner/energy efficiency expert) to prepare a Construction Equipment Efficiency Plan that identifies the specific measures that SCE (and its construction contractors) will implement as part of Project construction to increase the efficient use of construction equipment to the maximum extent feasible. Such measures shall include, but not necessarily be limited to: procedures to ensure that all construction equipment is properly tuned and maintained at all times; a commitment to utilize existing electricity sources where feasible rather than portable diesel-powered generators; and identification of procedures (including the routing of haul trips) that shall be followed to ensure that all materials and debris hauling is conducted in a fuel-efficient manner. The plan shall be submitted to CPUC for review and approval at least 30 days prior to the beginning of construction activities.
>
> **Significance after Mitigation:** Less than Significant.

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b) Affect local and regional energy supplies to the point that additional capacity of those energy supplies would be required. (Beneficial Impact)

The Project would be located within SCE's service territory and would transmit energy to the regional power grid. The Project would contribute to meeting projected local peak demand electricity needs. Consequently, the Project would have a beneficial impact on local and regional energy supplies because it would ensure that current energy needs are met and that there is capacity and infrastructure to meet projected future energy needs in the electrical needs area. No adverse impact on local or regional energy supplies or capacity would result (Class IV).

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c) Adversely affect peak and base period demands for electricity and other forms of energy. (No Impact)

The Project would transmit electrical energy to the grid during peak and base periods. Impacts to peak or base electricity demands would occur if significant amounts of electricity were required for construction, operation, or maintenance of the Project such that SCE would be required to increase its available supply or production capacity. There may be a limited temporary increase in use of electricity resources during construction, and periodic energy requirements during operation and maintenance, as discussed under Impact 4.6-1. However, given the negligible amount of electricity required for the Project, neither construction nor operation and maintenance would impact peak or base power demands. Additionally, the Project would not impact electricity generation facilities' ability to provide and maintain existing levels of service during peak and base period demands.

Consequently, the Project would cause no adverse impact related to the demand for electricity or other forms of energy (No Impact).

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d) Conflict with existing energy standards. (No Impact)

As described in Section 4.6.1, above, Part 6 of the California Building Standards Code contains the California Energy Code (CCR Title 24, Part 6). The local government building permit application review process would ensure that the proposed Project is compliant with all applicable state and local energy conservation standards. Therefore, no impact related to compliance with applicable energy and energy conservation standards would result, and this criterion is not discussed further in this section (No Impact).

e) Adversely affect existing energy resources.

As discussed above, the Project would increase the reliability of the local electrical subtransmission grid and distribution supply during peak demand times, reducing the likelihood of interruptions in electrical distribution due to demand on the system. Consequently, operation of the Project would not result in adverse impacts on existing energy resources (Class IV).

Impact 4.6-2: Construction could adversely affect existing energy resources. *Less than significant* (Class III)

Construction-related energy consumption would represent irreversible consumption of finite natural energy resources during the 18 months of construction activity. The total average annual fuel use during the 1.5-year construction period would be approximately 31,000 gallons per year of gasoline and approximately 149,000 gallons per year of diesel fuel. The annual average gasoline use amounts are equivalent to less than 0.01 percent of the total gasoline fuel sold in Riverside or San Bernardino County, and the annual average diesel use amount is equivalent to 0.10 percent and 0.06 percent diesel fuel sold in Riverside and San Bernardino counties, respectively (see Section 4.6.1, *Setting*). Construction activities would not result in long-term depletion of non-renewable energy resources and would not permanently increase reliance on energy resources that are not renewable. Construction activities would not reduce or interrupt existing electrical or natural gas services due to insufficient supply, nor would they interrupt existing local SCE service. Project-specific construction-related fuel demands would not be expected to have a significant adverse effect on energy resources given the low level of the fuel amounts relative to the amounts sold each year in Riverside and San Bernardino counties. In addition, compliance with the state's regulation for in-use off-road diesel vehicles that requires idling limitations to no more than 5 minutes, unless idling is required for safety purposes, would further ensure that fuel energy consumed in the construction phase would not be wasted through unnecessary idling. Therefore, energy consumption by construction activities would result in less-than-significant impacts pertaining to the potential to adversely affect existing energy resources.

Mitigation: None required.

4.6.5 Alternatives

4.6.5.1 Alternative A: No Project Alternative

The No Project Alternative would have no energy impacts because no energy would be consumed by construction activities, or during operations and maintenance (No Impact). However, if the project is not built, SCE forecast indicates that long-term peak electrical demand requirements in the electrical needs area (ENA) will not be met. Although the No Project Alternative would consume no energy during construction, operation, and maintenance, it could result in a long-term loss of reliability in the local electrical distribution system. This impact is considered less than significant, as another project would likely be constructed to address this deficiency. Therefore, this alternative would result in no impact to energy conservation regarding criteria a), c), d), and f) (No Impact), and a less-than-significant impact regarding criteria b) and e) (adverse impact on local or regional energy supplies and existing energy resources; Class III).

4.6.5.2 Subtransmission Service Objective Alternatives

The proposed Mira Loma-Jefferson 66 kV subtransmission line is shown on **Figure 2-6** in Chapter 2, *Project Description*. Alternatives C1 and C2 are shown on **Figure 3-2a** and Alternative C3 is shown on **Figure 3-2b**, in Chapter 3, *Project Alternatives.*

Alternative B: Mira Loma-Jefferson 66 kV Subtransmission Line Without Substation

Under Alternative B, the proposed Mira Loma-Jefferson 66 kV Subtransmission Line would be constructed and the proposed Circle City Substation, its source lines, and the associated telecommunications facilities would not be constructed. Since Alternative B would involve a substantially reduced construction effort, it would be less energy intensive than the proposed Project and there would be less of a potential for it to result in inefficient or wasteful consumption of energy and increased consumption of energy although the potential would still exist. The potential for construction activities to use large amounts of fuel or energy in a wasteful or inefficient manner is considered a significant impact. However, with implementation of Mitigation Measure 4.6-1 (Construction Equipment Efficiency Plan), which would ensure construction activities are conducted in a fuel-efficient manner, the impact would be reduced to a less-than-significant level (Impact 4.6-1; Class II). Similar to the proposed Project, energy consumption by construction activities under Alternative B would result in less-than-significant impacts pertaining to the potential to adversely affect existing energy resources (Impact 4.6-2; Class II).

Alternative C1: Underground 66 kV Subtransmission Line along Hellman Avenue

Alternative C1 would include an additional 0.4 mile of underground line construction compared to the proposed Mira Loma-Jefferson subtransmission line. Since underground subtransmission line construction activities are more energy intensive than above ground construction activities due to higher intensity of equipment use, there would be a higher potential for Alternative C1 to result in inefficient or wasteful consumption of energy and increased consumption of energy compared to the proposed Mira Loma-Jefferson subtransmission line. The impact conclusion would

be the same as for the proposed Project, less than significant with implementation of Mitigation Measure 4.6-1 (Impact 4.6-1; Class II). Similar to the proposed Project, energy consumption by construction activities under Alternative C1 would result in less-than-significant impacts pertaining to the potential to adversely affect existing energy resources (Impact 4.6-2; Class II).

Alternative C2: 66 kV Subtransmission Line along Archibald Avenue

Alternative C2 would be approximately 1.5 miles shorter, but would include an additional 1.2 miles of underground line construction compared to the proposed Mira Loma-Jefferson subtransmission line. Even though this alternative alignment is shorter, since underground subtransmission line construction activities are more energy intensive than above ground construction activities due to higher intensity of equipment use, there would be a higher potential for Alternative C2 to result in inefficient or wasteful consumption of energy and increased consumption of energy compared to the proposed Mira Loma-Jefferson subtransmission line. The impact conclusion would be the same as for the proposed Project, less than significant with implementation of Mitigation Measure 4.6-1 (Impact 4.6-1; Class II). Similar to the proposed Project, energy consumption by construction activities under Alternative C2 would result in less-than-significant impacts pertaining to the potential to adversely affect existing energy resources (Impact 4.6-2; Class II).

Alternative C3: 66 kV Subtransmission-Level Battery Storage

Under Alternative C3, up to three subtransmission-level (66 kV) battery storage and substation facilities, associated subtransmission lines, and upgrades to existing Jefferson Substation, would be constructed and operated instead of the Mira Loma-Jefferson 66 kV line component of the Project. Given the similarities of the infrastructure and site areas that would be required for the subtransmission-level battery storage and substation facilities under Alternative C3 and the proposed Circle City Substation, it is assumed that energy consumption associated with each of the three subtransmission-level battery storage and substation facilities would be similar to the energy consumption due to construction of the proposed Circle City Substation and that overall, and overall energy use under Alternative C3 would be greater than under the proposed Project. The electricity required to power the air conditioning units would be obtained internally and each individual unit would be directly connected to the energy storage system's discharge and would not require additional electrical input. There would be a higher potential for Alternative C3 to result in inefficient or wasteful consumption of energy and increased consumption of energy compared to the proposed Mira Loma-Jefferson subtransmission line. The impact conclusion would be the same as for the proposed Project, less than significant with implementation of Mitigation Measure 4.6-1 (Impact 4.6-1; Class II). Similar to the proposed Project, energy consumption by construction activities under Alternative C3 would result in less-than-significant impacts pertaining to the potential to adversely affect existing energy resources (Impact 4.6-2; Class II).

4.6.5.3 Distribution Service Objective Alternatives

The proposed Pedley and Databank 66 kV source lines and the proposed Circle City Substation are shown on **Figure 2-5**, in Chapter 2, *Project Description*. Alternative D1 is shown on **Figures 3-3** and **3-4** and Alternatives D2, E1, E2, E3, and E4 are shown on **Figure 3-6** in Chapter 3, *Project Alternatives.*

Alternative D1:12 kV Distribution-Level Battery Storage

Under Alternative D1, a distribution-level (12 kV) battery storage facility would be constructed and operated instead of the Circle City Substation and associated sources lines components of the Project. Given the reduced scope of the infrastructure and site area that would be required for the distribution-level battery storage facility under Alternative D1 compared to the proposed Circle City Substation, it is assumed that energy use under Alternative D1 would be reduced compared to the proposed Project. The electricity required to power the air conditioning units would be obtained internally and each individual unit would be directly connected to the energy storage system's discharge and would not require additional electrical input. There would be less of a potential for Alternative D1 to result in inefficient or wasteful consumption of energy and decreased consumption of energy compared to the proposed Mira Loma-Jefferson subtransmission line although the potential would still exist. The impact conclusion would be the same as for the proposed Project, less than significant with implementation of Mitigation Measure 4.6-1 (Impact 4.6-1; Class II). Similar to the proposed Project, energy consumption by construction activities under Alternative D1 would result in less-than-significant impacts pertaining to the potential to adversely affect existing energy resources (Impact 4.6-2; Class II).

Alternative D2:66/12 kV Substation Site Alternative

Alternative D2 would result in the same energy conservation-related impacts as the proposed Circle City Substation. Impacts would be less than significant with implementation of Mitigation Measure 4.6-1 (Impact 4.6-1; Class III). Similar to the proposed Project, energy consumption by construction activities under Alternative D2 would result in less-than-significant impacts pertaining to the potential to adversely affect existing energy resources (Impact 4.6-2; Class II).

Alternative E1: Quarry Street 66 kV Source Line Segment

Alternative E1 would be approximately 300 feet longer and would include an additional 800 feet of underground line construction compared to the proposed Pedley Source Lines. Since underground subtransmission line construction activities are more energy intensive than above ground construction activities, there would be a higher potential for Alternative E1 to result in inefficient or wasteful consumption of energy and increased consumption of energy compared to the proposed Pedley Source Lines. The impact conclusion would be the same as for the proposed Project, less than significant with implementation of Mitigation Measure 4.6-1 (Impact 4.6-1; Class II). Similar to the proposed Project, energy consumption by construction activities under Alternative E1 would result in less-than-significant impacts pertaining to the potential to adversely affect existing energy resources (Impact 4.6-2; Class II).

Alternative E2: Underground Pedley 66 kV Source Lines from I-15 to Circle City Substation

Alternative E2 would include an additional 1.5 miles of underground line construction compared to the proposed Pedley Source Lines. Since underground subtransmission line construction activities are more energy intensive than above ground construction activities, there would be a higher potential for Alternative E2 to result in inefficient or wasteful consumption of energy and increased consumption of energy compared to the proposed Pedley Source Lines. The impact conclusion would be the same as for the proposed Project, less than significant with

implementation of Mitigation Measure 4.6-1 (Impact 4.6-1; Class II). Similar to the proposed Project, energy consumption by construction activities under Alternative E2 would result in less-than-significant impacts pertaining to the potential to adversely affect existing energy resources (Impact 4.6-2; Class II).

Alternative E3: Southern Route 66 kV Source Lines Alignment

Alternative E3 would be approximately 0.1 mile longer than the proposed Databank Source Lines, but unlike the proposed source lines, it would not include underground subtransmission line construction activities. Since underground subtransmission line construction activities are more energy intensive than above ground construction activities, there would likely be a lower potential for Alternative E3 to result in inefficient or wasteful consumption of energy and increased consumption of energy compared to the proposed Databank Source Lines. The impact conclusion would be the same as for the proposed Project, less than significant with implementation of Mitigation Measure 4.6-1 (Impact 4.6-1; Class II). Similar to the proposed Project, energy consumption by construction activities under Alternative E3 would result in less-than-significant impacts pertaining to the potential to adversely affect existing energy resources (Impact 4.6-2; Class II).

Alternative E4: Databank 66 kV Source Lines Only

Under Alternative E4, only the Databank Source Lines would be constructed to connect to Circle City Substation and the Pedley Source Lines would not be constructed. Since Alternative E4 would involve a substantially reduced construction effort, it would be less energy intensive than the proposed Project and there would be less of a potential for it to result in inefficient or wasteful consumption of energy and increased consumption of energy although the potential would still exist. The potential for construction activities to use large amounts of fuel or energy in a wasteful or inefficient manner is considered a significant impact. However, with implementation of Mitigation Measures 4.6-1, the impact would be reduced to a less-than-significant level (Impact 4.6-1; Class II). Similar to the proposed Project, energy consumption by construction activities under Alternative E4 would result in less-than-significant impacts pertaining to the potential to adversely affect existing energy resources (Impact 4.6-2; Class II).

References – Energy Conservation

24/7 Wall Street, 2017. Average Fuel Economy for 264 Million U.S. Light Vehicles: 22 Miles per Gallon, by Paul Ausick, March 2, 2017.

California Department of Tax and Fee Administration, 2017. Net Taxable Gasoline Gallons (Including Aviation Gasoline). Available online at: http://www.cdtfa.ca.gov/taxes-and-fees/MVF_10_Year_Report.pdf.

California Energy Commission (CEC), 2016a. Total Electricity System Power, 2015 Total System Power in Gigawatt Hours. Available online at: http://www.energy.ca.gov/almanac/electricity_data/total_system_power.html, accessed November 14, 2016.

CEC, 2016b. Supply and Demand of Natural Gas in California. Available at: http://www.energy.ca.gov/almanac/naturalgas_data/overview.html, accessed November 14, 2016.

CEC, 2016c. Oil Supply Sources to California Refineries. Available at: http://www.energy.ca.gov/almanac/petroleum_data/statistics/crude_oil_receipts.html, accessed November 14, 2016.

CEC, 2016d. 2015 Integrated Energy Policy Report, CEC-100-2015-001-CMF. Available at: http://www.energy.ca.gov/2015_energypolicy/. Accessed on November 1, 2016.

CEC, 2017a. California Annual Retail Fuel Outlet Report Results and Analysis (CEC-A15). Available online at: http://www.energy.ca.gov/almanac/transportation_data/gasoline/2016_A15_Results.xlsx. Accessed May 5, 2017.

CEC, 2017b. Diesel Fuel Data, Facts, and Statistics. Available online at: http://www.energy.ca.gov/almanac/transportation_data/diesel.html. Accessed April 7, 2017.

CEC, 2013. Building Energy Efficiency Standards for Residential and Nonresidential Buildings, Available at: http://www.energy.ca.gov/title24/2013standards/index.html/, accessed November 1, 2016.

City of Chino, 2010. *Envision Chino: City of Chino General Plan 2025*, *Safety Element.* July.

City of Corona, 2004. *City of Corona General Plan.* Adopted March 17.

City of Eastvale, 2012. *City of Eastvale General Plan*. Adopted June 13, 2012.

City of Ontario, 2010. City of Environmental Resources Element. Available online at: http://www.ontarioplan.org/policy-plan/. Accessed on June 13, 2016.

Southern California Edison (SCE, 2016). Southern California Edison- Our Service Territory. Available at: https://www.sce.com/wps/portal/home/about-us/who-we-are/leadership/our-service-territory/our%20service%20territory/!ut/p/b0/04_Sj9CPykssy0xPLMnMz0vMAfGjzOINLdwdPTyDDTz9g4xdDDyDjEIsHU28DUycDfULsh0VAc4afN0!/, accessed November 14, 2016.

Union of Concerned Scientists, 2017. Engines for Change (2015). Accessed webpage (http://www.ucsusa.org/clean-vehicles/fuel-efficiency/heavy-duty-truck-standards#.WO0i-Sj2aUl) April 11, 2017.

U.S. Energy Information Administration (EIA), 2017. California State Profile and Energy Estimates. Accessed webpage (https://www.eia.gov/state/analysis.php?sid=CA) May 4, 2017.

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4.8 Greenhouse Gas Emissions

This section evaluates whether the Project, as well as the alternatives, would result in impacts associated with greenhouse gas (GHG) emissions during construction, operation, and maintenance activities.

4.8.1 Environmental Setting

4.8.1.1 Climate Change

According to the U.S. Environmental Protection Agency (USEPA), the term "climate change" refers to any significant change in measures of climate (such as temperature, precipitation, or wind) lasting for an extended period (over several decades or longer). There is scientific consensus that climate change is occurring and that human activity contributes in some measure (perhaps substantially) to that change. Gases that trap heat in the atmosphere are often called GHGs. Emissions of GHGs, if not sufficiently curtailed, are likely to contribute further to increases in global temperatures. The potential effects of climate change in California include sea level rise and reductions in snowpack, as well as an increased number of extreme-heat days per year, high ozone days, large forest fires, and drought years (CARB, 2014). Globally, climate change could affect numerous environmental resources through potential, though uncertain, changes in future air temperatures and precipitation patterns. According to the International Panel on Climate Change (IPCC), the observed and/or projected effects of climate change vary regionally, but include the following direct effects (IPCC, 2014):

- Changing precipitation and snow melt patterns;
- Negative effect on crop yield;
- Increased heat waves, drought, flood, wildfires, and storm events;
- Reduced renewable water resources in most dry subtropical regions; and
- Ocean acidification damage to marine ecosystems.

In addition, many secondary effects are projected to result from climate change, including a global rise in sea level, ocean acidification, impacts on agriculture, changes in disease vectors, and changes in habitat and biodiversity. The possible outcomes and feedback mechanisms involved are not fully understood, and much research remains to be done; however, over the long term, the potential exists for substantial environmental, social, and economic consequences.

4.8.1.2 Greenhouse Gas Emissions

GHG emissions that result from human activities primarily include carbon dioxide (CO_2), with much smaller amounts of nitrous oxide (N_2O), methane (CH_4, often from unburned natural gas), sulfur hexafluoride (SF_6) from high-voltage power equipment, and hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs) from refrigeration/chiller equipment. Because these GHGs have different warming potentials (i.e., the amount of heat trapped in the atmosphere by a certain mass of the gas), and CO_2 is the most common reference gas for climate change, GHG emissions are often quantified and reported as CO_2-equivalent (CO_2e) emissions. For example, while SF_6 represents a small fraction of the total annual GHGs emitted worldwide, this gas is very potent,

with 23,900 times the global warming potential of CO_2. Therefore, an emission of 1 metric ton of SF_6 would be reported as 23,900 metric tons CO_2e. The global warming potential of CH_4 and N_2O are 25 times and 298 times that of CO_2, respectively (CARB, 2016a). The principal GHGs resulting from human activity that enter and accumulate in the atmosphere are described below.

Carbon Dioxide

CO_2 is a naturally occurring gas that enters the atmosphere through natural as well as anthropogenic (human) sources. Key anthropogenic sources include the burning of fossil fuels (e.g., oil, natural gas, and coal), solid waste, trees, wood products, and other biomass, as well as industrially relevant chemical reactions such as those associated with manufacturing cement. CO_2 is removed from the atmosphere when it is absorbed by plants as part of the biological carbon cycle.

Methane

Like CO_2, CH_4 is emitted from both natural and anthropogenic sources. Key anthropogenic sources of CH_4 include gaseous emissions from landfills, releases associated with mining and materials extraction industries (in particular coal mining), and fugitive releases associated with the extraction and transport of natural gas and crude oil. CH_4 emissions also result from livestock and agricultural practices. Small quantities of CH_4 are released during fossil fuel combustion.

Nitrous Oxide

N_2O is also emitted from both natural and anthropogenic sources. Important anthropogenic sources include industrial activities, agricultural activities (primarily the application of nitrogen fertilizer), the use of explosives, combustion of fossil fuels, and decay of solid waste.

Fluorinated Gases

HFCs, PFCs, and SF_6 are synthetic gases emitted from a variety of industrial processes, and they contribute substantially more to the greenhouse effect on a pound for pound basis than the GHGs described previously. Fluorinated gases are often used as substitutes for ozone-depleting substances (i.e., chlorofluorocarbons, hydrochlorofluorocarbons, and halons). These gases are typically emitted in small quantities, but because of their potency they are sometimes referred to as “high global warming potential gases.” Fluorinated gases in the form of SF_6 would be emitted by circuit breakers that would be associated with the proposed Project.

4.8.1.3 Greenhouse Gas Sources

Anthropogenic GHG emissions in the United States are derived mostly from the combustion of fossil fuels for transportation and power production. Energy-related CO_2 emissions resulting from fossil fuel exploration and use account for approximately three-quarters of the human-generated GHG emissions in the United States, primarily in the form of CO_2 emissions from burning fossil fuels. More than half of the energy-related emissions come from large stationary sources, such as power plants; approximately one-third derive from transportation; and a majority of the remaining sources include: industrial processes, agriculture, commercial, and residential (USEPA, 2016a).

Statewide emissions of GHG from relevant source categories for 2009 through 2015 are summarized in **Table 4.8-1**. Specific contributions from individual air basins, such as the South

Coast Air Basin (Air Basin), which encompasses the Project area, are included in the emissions inventory but are not itemized by air basin. In 2015, California produced 440.4 million gross metric tons of CO_2e emissions. Transportation was the source of 39 percent of the state's GHG emissions, followed by industrial at 23 percent, electricity generation at 19 percent, commercial and residential sources at 11 percent, and agriculture and forestry comprised the remaining 8 percent (CARB, 2017a).

TABLE 4.8-1
CALIFORNIA GHG EMISSIONS (MILLION METRIC TONS CO_2E)

Emission Inventory Category	2009	2010	2011	2012	2013	2014	2015	
Electricity Generation (In State)	53.51	46.91	41.36	51.18	49.60	51.81	50.21	11.4%
Electricity Generation (Imports)	48.13	43.67	46.94	44.15	40.24	36.56	33.88	7.7%
Transportation	171.45	168.11	164.70	164.38	163.05	164.89	169.38	38.5%
Industrial	97.31	101.12	101.08	101.46	104.27	104.69	102.97	23.4%
Commercial	18.64	20.09	20.73	21.11	21.64	21.37	22.17	5.0%
Residential	30.21	31.26	32.03	30.04	31.19	26.26	26.93	6.1%
Agriculture and Forestry	33.83	34.64	35.28	36.42	34.93	36.03	34.65	7.9%
Not Specified (Solvents & Chemicals)	0.26	0.27	0.25	0.24	0.18	0.24	0.17	<0.1%
Total Gross Emissions	**453.34**	**446.06**	**442.38**	**448.97**	**445.08**	**441.85**	**440.36**	**100.00%**

SOURCE: CARB, 2017a.

4.8.1.4 Regulatory Setting

Federal

Clean Air Act

On April 2, 2007, in *Massachusetts v. USEPA* (549 US 497), the Supreme Court found that GHGs are air pollutants covered by the Clean Air Act. The Court held that the USEPA must determine whether emissions of GHGs from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In making such decisions, the USEPA is required to follow the language of Section 202(a) of the Clean Air Act, which obligates it to prescribe (and from time to time revise) standards applicable to the emission of any air pollutant from any class or classes of new motor vehicles or new motor vehicle engines. The Supreme Court decision resulted from a petition for rulemaking under Section 202(a) filed by more than a dozen environmental, renewable energy and other organizations.

On April 17, 2009, the USEPA Administrator signed proposed "endangerment" and "cause or contribute" findings for GHGs under Section 202(a) of the Clean Air Act. The USEPA found that six GHGs, taken in combination, endanger both the public health and the public welfare of current and future generations. The USEPA also found that the combined emissions of these GHGs from new motor vehicles and new motor vehicle engines contribute to the greenhouse effect as air pollution that endangers public health and welfare under Clean Air Act Section 202(a). Pursuant to 40 CFR Part 52, *Proposed Prevention of Significant Deterioration*

and Title V Greenhouse Gas Tailoring Rule, USEPA has mandated that Prevention of Significant Deterioration (PSD) and Title V requirements apply to facilities whose stationary source CO_2e emissions exceed 100,000 tons per year (USEPA, 2016b). The proposed Project would not trigger PSD or Title V permitting under this regulation because it would generate less than 100,000 tons of CO_2e emissions per year.

U.S. Supreme Court Decision in Utility Air Regulatory Group v. USEPA

On June 23, 2014, the U.S. Supreme Court held that USEPA may not treat GHG emissions as an air pollutant for purposes of determining whether a source is a major source required to obtain a PSD or Title V permit. The Court also held that PSD permits that are otherwise required (based on emissions of other pollutants) may continue to require limitations on GHG emissions based on the application of Best Available Control Technology (BACT). In accordance with the Supreme Court decision, on April 10, 2015, the D.C. Circuit issued an amended judgment in *Coalition for Responsible Regulation, Inc. v. U.S. Environmental Protection Agency*, which vacated the PSD and Title V regulations under review in that case to the extent that they require a stationary source to obtain a PSD or Title V permit solely because the source emits or has the potential to emit GHGs above the applicable major source thresholds. The D.C. Circuit also directed USEPA to consider whether any further revisions to its regulations are appropriate, and if so, to undertake to make such revisions. In response to the Supreme Court decision and the D.C. Circuit's amended judgment, the USEPA intends to conduct future rulemaking action to make appropriate revisions to the PSD and operating permit rules (USEPA, 2016b).

40 CFR Part 98. Use of Electric Transmission and Distribution Equipment

Pursuant to federal regulations (i.e., 40 CFR Part 98, Subpart DD) operators of certain electrical facilities, such as SF_6-containing circuit breakers, are required to report SF_6 emissions to the USEPA (USEPA, 2016c). SF_6-containing circuit breakers associated with the Project would be subject to reporting under this regulation.

State

A variety of statewide rules and regulations mandate the quantification and, if emissions exceed established thresholds, the reduction of GHGs. CEQA requires Lead Agencies to evaluate project-related GHG emissions and the potential for projects to contribute to climate change and to provide appropriate mitigation in cases where the Lead Agency determines that a project would result in a significant addition of GHGs to the atmosphere.

Executive Order S-3-05

In June 2006, Governor Arnold Schwarzenegger signed Executive Order S-3-05, which established the following statewide emission-reduction targets through the year 2050:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

This executive order does not contain any requirements that directly pertain to the proposed project; however, future actions taken by the State of California to implement these goals may

affect the proposed project, depending on the specific implementation measures that are developed.

Assembly Bill 32

California Assembly Bill (AB) 32, *the Global Warming Solutions Act of 2006*, required the California Air Resources Board (CARB) to establish a statewide GHG emissions cap for 2020 based on 1990 emission levels. AB 32 required CARB to adopt regulations that identify and require selected sectors or categories of emitters of GHGs to report and verify their statewide GHG emissions, and CARB is authorized to enforce compliance with the program. Under AB 32, CARB also was required to adopt a statewide GHG emissions limit equivalent to the statewide GHG emissions levels in 1990, which must be achieved by 2020. CARB established this limit in December 2007 at 427 million metric tons of CO_2e. This is approximately 30 percent below forecasted "business-as-usual" emissions of 596 million metric tons of CO_2e in 2020, and about 10 percent below average annual GHG emissions during the period of 2002 through 2004 (CARB, 2009). In the interest of achieving the maximum technologically feasible and cost-effective GHG emission reductions, AB 32 permits the use of market-based compliance mechanisms and requires CARB to monitor compliance with and enforce any rule, regulation, order, emission limitation, emissions reduction measure, or market-based compliance mechanism that it adopts.

Climate Change Scoping Plan (AB 32 Scoping Plan)

In December 2008, CARB approved the AB 32 Scoping Plan outlining the State's strategy to achieve the 2020 GHG emissions limit. The Scoping Plan estimates a reduction of 174 million metric tons CO_2e (about 191 million tons) from the transportation, energy, agriculture, forestry, and high climate-change-potential sectors, and proposes a comprehensive set of actions designed to reduce overall GHG emissions in California, improve the environment, reduce dependence on oil, diversify California's energy sources, save energy, create new jobs, and enhance public health. The Scoping Plan must be updated every 5 years to evaluate the mix of AB 32 policies to ensure that California is on track to achieve the 2020 GHG reduction goal. Appendices C and E of the adopted 2008 AB 32 Scoping Plan include a list of 39 recommended action measures to reduce GHG emissions (CARB, 2009). Of these measures, only one is directly relevant to the Project. Measure H-6, High GWP Gases was designed to reduce emissions of SF_6 within the electric utility sector and at particle accelerators by requiring the use of best achievable control technology for the detection and repair of leaks, and the recycling of SF_6.

The AB 32 Scoping Plan must be updated every five years to evaluate the adopted mix of AB 32 policies to ensure that California is on track to achieve the 2020 GHG reduction goal. CARB released its first Scoping Plan Update in May 2014 (CARB, 2014). There are no recommended actions identified in the Scoping Plan Update that are directly applicable to the proposed Project.

California Renewable Energy Programs

In 2002, California initially established its Renewables Portfolio Standard (RPS), with the goal of increasing the percentage of renewable energy in the State's electricity mix to 20 percent by 2017. State energy agencies recommended accelerating that goal, and California Executive Order S-14-08 (November 2008) required California utilities to reach the 33 percent renewable electricity

goal by 2020, consistent with the AB 32 Scoping Plan. In April 2011, Senate Bill 2 of the First Extraordinary Session (SB X1-2) was signed into law. SB X1-2 expressly applies the new 33 percent RPS by December 31, 2020, to all retail sellers of electricity and establishes renewable energy standards for interim years prior to 2020. Senate Bill 350 (SB 350) of 2015 (Chapter 547, Statutes of 2015) increased the RPS to 50 percent by the year 2030.

Mandatory Reporting Requirements

Pursuant to California Code of Regulations Title 17, Sections 95100 through 95158, operations of large industrial stationary combustion and process emissions sources that emit 10,000 metric tons CO_2e or more per calendar year are required to report and verify their GHG emissions to CARB. As indicated in **Table 4.8-3** under Impact 4.8-1, below, the total amortized GHG emissions for the proposed Project would be 116 metric tons per year, which is below the AB 32 reporting threshold; therefore, the proposed Project would not be subject to the AB 32 mandatory reporting requirements.

Market-Based "Cap-and-Trade" Compliance Mechanism

AB 32 allows the use of market-based compliance mechanisms to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 also requires CARB to monitor compliance with and enforce any rule, regulation, order, emission limitation, emissions reduction measure, or market-based compliance mechanism that it adopts. In response, CARB adopted a cap-and-trade program that covers major sources of GHG emissions such as refineries and power plants. The program includes an annual emissions cap that declines over time. CARB's cap-and-trade program applies to facilities that would emit 25,000 metric tons or more of CO_2e per year. Since the total amortized GHG emissions for the proposed Project are estimated at 116 metric tons per year, the cap-and-trade program would not apply to the proposed Project (see Section 4.8.4 for a discussion and breakdown of the construction-related and operational GHG emissions associated with the proposed Project).

Senate Bill 97

In 2007, the California State Legislature passed SB 97, which required amendment of the CEQA Guidelines to incorporate analysis of, and mitigation for, GHG emissions from projects subject to CEQA. The amendments took effect March 18, 2010. The amendments added Section 15064.4 to the CEQA Guidelines, specifically addressing the potential significance of GHG emissions. Section 15064.4 calls for a "good faith effort" to "describe, calculate or estimate" GHG emissions and indicates that the analysis of the significance of any GHG impacts should include consideration of the extent to which the project would:

- Increase or reduce GHG emissions;
- Exceed a locally applicable threshold of significance; or
- Comply with "regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions."

The CEQA Guidelines also state that a project may be found to have a less-than-significant impact related to GHG emissions if it complies with an adopted plan that includes specific measures to sufficiently reduce GHG emissions (14 Cal. Code Regs. §15064(h)(3)). Importantly,

however, the CEQA Guidelines do not require or recommend a specific analytical methodology or provide quantitative criteria for determining the significance of GHG emissions.

Executive Order B-30-15 and SB 32

In April 2015, Governor Edmund G. Brown Jr. issued an executive order to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. Reaching this emission reduction target will make it possible for California to reach its ultimate goal of reducing emissions 80 percent under 1990 levels by 2050, as identified in Executive Order S-3-05. Executive Order B-30-15 also specifically addresses the need for climate adaptation and directs state government to:

- Incorporate climate change impacts into the State's Five-Year Infrastructure Plan;
- Update the Safeguarding California Plan, the state climate adaption strategy to identify how climate change will affect California infrastructure and industry and what actions the state can take to reduce the risks posed by climate change;
- Factor climate change into state agencies' planning and investment decisions; and
- Implement measures under existing agency and departmental authority to reduce GHG emissions (Office of the Governor, 2015).

Executive Order B-30-15 required CARB to update the AB 32 Climate Change Scoping Plan to incorporate the 2030 target. Subsequently, SB 32, which codifies the Executive Order's 2030 emissions reduction target, was approved by the Governor on September 8, 2016. SB 32 requires CARB to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions to ensure that statewide GHG emissions are reduced to at least 40 percent below the 1990 statewide GHG emissions limit no later than December 31, 2030, the target established by Executive Order B-30-15. CARB recently adopted the 2017 Scoping Plan for achieving this goal, which takes into account the key programs associated with implementation of the AB 32 Scoping Plan--such as GHG reduction programs for cars, trucks, fuels, industry, and electrical generation--and builds upon, in particular, existing programs related to the Cap-and-Trade Regulation; the Low Carbon Fuel Standard; much cleaner cars, trucks, and freight movement; power generation for the State using cleaner renewable energy; and strategies to reduce methane emissions from agricultural and other wastes by using it to meet the State's energy needs. The 2017 Scoping Plan also addresses, for the first time, GHG emissions from natural and working lands, including the agriculture and forestry sectors (CARB, 2017b).

SB 350

SB 350 of 2015 (Chapter 547, Statutes of 2015) revises the state's RPS Program by requiring utilities to procure at least 50 percent of the retail electricity from renewable sources by 2030. The law also requires the California Energy Commission (CEC) to establish annual energy efficiency standards designed double the electricity and natural gas savings for existing buildings by 2030.

Regulation for Reducing SF_6 Emissions from Gas Insulated Switchgear

The purpose of this regulation (17 Cal. Code Regs. §95350 et seq.) is to achieve GHG emission reductions by reducing SF_6 emissions from gas-insulated switchgear. Owners of such switchgear

must not exceed maximum allowable annual emissions rates, which are reduced each year until 2020, after which annual emissions must not exceed 1.0 percent of the total SF_6 capacity of all of the owner's active gas-insulated switchgear equipment. As defined by the regulation, the annual emissions rate equals the gas-insulated switchgear owner's total annual SF_6 emissions from all active gas-insulated switchgear equipment divided by the average annual SF_6 nameplate capacity of all active gas-insulated switchgear equipment. Owners must regularly inventory gas-insulated switchgear equipment, measure quantities of SF_6, and maintain records of these for at least 3 years. Additionally, by June 1st each year, owners also must submit an annual report to CARB's Executive Officer for emissions that occurred during the previous calendar year (CARB, 2016b).

Local

The CPUC has sole and exclusive state jurisdiction over the siting and design of the Project. Pursuant to CPUC General Order No. 131-D, Section XIV.B, "Local jurisdictions acting pursuant to local authority are preempted from regulating electric power line projects, distribution lines, substations, or electric facilities constructed by public utilities subject to the CPUC's jurisdiction. However, in locating such projects, the public utilities shall consult with local agencies regarding land use matters." Consequently, public utilities are directed to consider local regulations and consult with local agencies, but the counties and cities' regulations are not applicable as the counties and cities do not have jurisdiction over the Project. Regardless, there are no local adopted policies or goals for reducing GHG emissions that would be directly applicable to the proposed Project.

Climate Action Plans

Several local jurisdictions in the Project area, including the County of Riverside, City of Corona, City of Chino, and City of Ontario have adopted climate action plans that establish goals and policies to reduce GHG emissions. Riverside County and City of Corona have goals to reduce emissions back to 1990 levels by the year 2020. The City of Chino's goal is to reduce its community GHG emissions to a level that is 15 percent below its 2008 emissions level by 2020; and the City of Ontario's goal is to reduce GHG emissions to 15 percent below 1990 levels by 2020, 37 percent below 1990 levels by 2030, 80 percent below 1990 levels by 2050. In order to reach the reduction goals, the plans include reduction measures such as encouraging energy efficiency and renewable energy in buildings, transit oriented planning, water conservation, and increased waste diversion (County of Riverside, 2015; City of Corona, 2012; City of Chino, 2013; and City of Ontario, 2016). The climate action plan measures are not directly applicable to the Project.

4.8.2 Significance Criteria

Based on CEQA *Guidelines* §15064.4 and §15064.7(c), as well as Appendix G, the project would result in significant greenhouse gas emissions effects on the environment if it would:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or

b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

4.8.3 Applicant Proposed Measures

No applicant proposed measures have been identified by SCE to reduce project impacts associated with GHG emissions.

4.8.4 Impacts and Mitigation Measures

4.8.4.1 Approach to Analysis

Climate change impacts are global, and therefore inherently cumulative in nature; no typical single project would result in emissions of a magnitude that would be significant on a project basis. As such, the assessment of significance in this EIR is based on a determination of whether the GHG emissions from the proposed Project represent a cumulatively considerable contribution to climate change.

The Project would result in GHG emissions from both short-term construction and long-term operations and maintenance activities. CEQA allows for significance criteria established by the applicable air pollution control district to be used to assess the impact of a project related to GHG emissions, at the discretion of the CEQA Lead Agency.

The South Coast Air Quality Management District (SCAQMD) has adopted an interim significance threshold of 10,000 metric tons CO_2e per year for operation of stationary and industrial sector projects (SCAQMD, 2008). This threshold was derived from emissions data from the four largest air districts in California and is based on the Executive Order S-3-05 GHG emissions reductions goal of 80 percent below 1990 levels by 2050, which is roughly equivalent to 84 percent below current levels by 2050. This emissions reduction goal goes beyond the AB 32 and Executive Order B-30-15/SB 32 emissions reduction goals established for 2020 and 2030, respectively. The emissions data suggests that stationary sources that emit greater than 10,000 metric tons CO_2e per year and are responsible for 90 percent of GHG emissions. This significance threshold represents a capture rate of 90 percent of all new and modified stationary source-related projects. A 90 percent emissions capture rate means 90 percent of the total emissions from all new or modified stationary source projects would be subject to analysis in an environmental impact report prepared pursuant to CEQA, including analysis of feasible alternatives and imposition of feasible mitigation measures (SCAQMD, 2008). Since Executive Order B-3-05 GHG emissions reductions goal of lowering GHG emissions to 80 percent below 1990 levels by 2050 is roughly equivalent to reducing emissions by 81 percent below current levels, the California Public Utilities Commission (CPUC) has determined that the GHG significance threshold of 10,000 metric tons per year for stationary source projects is based on substantial evidence and, therefore, has determined that it is appropriate for use in this analysis.

As noted above, this GHG significance threshold is intended for long-term operational GHG emissions associated with stationary sources, but SCAQMD has not adopted or recommended GHG significance thresholds for construction emissions. Therefore, the CPUC has elected to use an approach to the determination of significance of GHG construction emissions based on guidance developed by the SCAQMD. For construction related GHGs, SCAQMD recommends that total emissions from construction be amortized over 30 years representing the life of the project and

added to operational emissions and then compared to the operation-based significance threshold (SCAQMD, 2008). Similar to the SCAQMD's recommended approach for construction emissions, this analysis amortizes Project construction emissions over a 30-year project lifetime, adds them to the operational emissions, and then compares the combined emissions to the significance threshold of 10,000 metric tons CO_2e per year.

There are no applicable Riverside County, City of Chino, City of Corona, City of Eastvale, City of Norco, or City of Ontario plans, policies, regulations, or climate action plan measures that would be directly applicable to the Project. However, the Project's potential to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions is assessed by examining any potential conflicts with the GHG reduction goals set forth in Executive Order S-3-05, Executive Order B-30-15, and AB 32, including the potential for the Project to conflict with the recommended actions identified by CARB in its Climate Change Scoping Plan and/or any associated adopted regulations.

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

Impact 4.8-1: The Project would generate GHG emissions. *Less than significant* (Class III)

Construction Emissions

Construction of the Project would generate GHG emissions over a construction period of approximately 18 months. Exhaust emissions would result from construction equipment and machinery as well as from vehicular traffic generated by construction activities. As part of the CPUC's Permit to Construct application process, SCE provided construction-related GHG emissions estimates for the construction activities that would be associated with the Project (see Appendix D, *Air Quality and Greenhouse Gas Emissions Calculations*). CPUC's consultant, Environmental Science Associates (ESA), independently reviewed the emission estimates. SCE estimated Project emissions using the California Emissions Estimator Model (CalEEMod) version 2013.2.2 originally developed by the SCAQMD. This version of CalEEMod calculates the construction equipment exhaust emissions based on CARB's OFFROAD2011equipment emission and load factors. See Appendix D for all emission factors and assumptions used to estimate GHG emissions that would be associated with construction of the Project.

The short-term construction emissions estimates provided by SCE do not include indirect emissions estimates associated with the proposed use of 58 acre-feet of water for dust suppression, cleanup, crew member consumption, and hand washing (SCE, 2015; p. 4.17-10). Therefore, ESA supplemented SCE's emissions estimates to include construction-related indirect short-term electricity usage-related GHG emissions associated with proposed water use using emission and use factors established by the CEC and TCR (CEC, 2005; TCR, 2016). See Appendix D for all emission factors and assumptions used to estimate GHG emissions that would be associated with construction of the proposed Project.

Table 4.8-2, *Project Construction GHG Emissions,* presents the total estimated GHG construction emissions that would be associated with the Project generated by off-road construction equipment, on-road vehicles, and water use. Approximately 2,711 metric tons of CO_2e would be generated during the Project's 18-month construction phase.

TABLE 4.8-2
PROJECT CONSTRUCTION GHG EMISSIONS

Emissions Source	CO_2e metric tons
Off-road Construction Equipment	1,522
On-road Vehicles	1,132
Water Use Indirect Emissions	57
Total	**2,711**

SOURCE: SCE, 2015; 2016; see Appendix D for all emissions estimates.

Operation and Maintenance Emissions

Operation and maintenance of the Project would not result in new stationary combustion emission sources of GHGs nor would it increase GHG exhaust emissions from existing stationary sources. Mobile GHG source emissions-related activities associated with the operation of the Project would occur as a result of annual inspections for the subtransmission line, source lines, and telecommunication facilities components and weekly inspections at the substation. Operation and maintenance emissions were estimated by SCE and independently reviewed by ESA (see Appendix D for all assumptions used to estimate the Project operation and maintenance emissions).

In addition, GHG emissions associated with operation of the Project would result from the installation of SF_6-containing circuit breakers at the proposed Circle City Substation as well as the existing Mira Loma Substation. Annual SF_6 emissions for the Project were estimated based on a circuit breaker manufacturer's guaranteed leak rate of 0.5 percent of the total SF_6 capacity, and that a total of 11 new circuit breakers would be installed that would have a combined SF_6 capacity of 440 pounds. Ten new SF_6 circuit breakers would be installed at the proposed Circle City Substation and one would be installed at the existing Mira Loma Substation. Using the manufacturer's referenced leak rate of 0.5 percent, annual SF_6 emissions that would be associated with the Project would be equivalent to approximately 24 metric tons CO_2e per year.

Total Amortized Annual Emissions

As indicated in Table 4.8-2, *Project Construction GHG Emissions,* total GHG construction emissions would be approximately 2,711 metric tons CO_2e. These emissions amortized over a 30-year period equal approximately 90 metric tons per year. As presented in **Table 4.8-3**, *Project Amortized Annual Emissions*, adding 90 metric tons of CO_2e to the operational emissions of 26 metric tons CO_2e per year equals a total Project GHG emissions rate of approximately 116 metric tons CO_2e per year, which would be substantially less than the significance threshold of 10,000 metric tons CO_2e per year.

TABLE 4.8-3
PROJECT AMORTIZED ANNUAL EMISSIONS

Emissions Source	CO_2e metric tons/year
Construction emissions: total amortized (30 year period)	90
Maintenance and operations	2
SF_6 Circuit Breaker Emissions	24
Total	**116**
Significance threshold	10,000
Significant impact?	No

SOURCE: SCE, 2015; 2016; see Appendix D for all emissions estimates.

Therefore, the Project would not generate GHG emissions, either directly or indirectly, that would have a significant impact on the environment. Impacts would be less than significant.

Mitigation: None required.

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b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. (No Impact)

Construction, operation, and maintenance of the Project would result in increased GHG emissions compared to baseline conditions; however, the emissions would not exceed regional or quantitative thresholds developed to comply with AB 32 and the AB 32 Climate Change Scoping Plan. As discussed in *Approach to Analysis* above, the SCAQMD GHG emissions significance threshold used in Impact 4.8-1 goes beyond the AB 32 and Executive Order B-30-15/SB 32 emissions reduction goals established for 2020 and 2030, respectively, and is based on the Executive Order S-3-05 GHG emissions reductions goal of 80 percent below 1990 levels by 2050. Since amortized GHG emissions that would be associated with the Project would not exceed the significance threshold (see Table 4.8-3, above), the Project would not conflict with GHG reduction goals set forth in Executive Order S-3-05, Executive Order B-30-15/SB 32, or AB 32, including the proposed programs identified by CARB in its AB 32 and SB 32 Climate Change Scoping Plans.

Regarding management of Project-related SF_6, SCE has developed and would implement SF_6 gas management guidelines as described in SCE's document entitled *An Asset Management Approach for EPA/CARB SF6 Regulations* (SCE, 2012). This document includes an overview of the tools and methods that SCE utilizes to comply with both USEPA's Voluntary SF_6 Emission Reduction Partnership program and CARB's SF_6 regulations. This guideline document identifies storage methods, disposal method alternatives, and record-keeping requirements. Inventories of SF_6 that would be associated with the Project would be documented and annually reported to USEPA and CARB. Therefore, the Project would be consistent with the intent of AB32 Scoping Plan Measure H-6: High Global Warming Potential Gas Reductions from Stationary Sources, and CARB's associated legislation. Because the Project would be consistent (and would not conflict)

with these plans, policies, and regulations, it would cause no impact related to this significance criterion (No Impact).

4.8.5 Alternatives

4.8.5.1 Alternative A: No Project Alternative

Under the No Project Alternative, construction, operation, and maintenance-related impacts that would result under the Project, as discussed in Section 4.8.5, *Impacts and Mitigation Measures*, would not occur. Therefore, no impact related to GHG emissions would occur under the No Project Alternative (No Impact).

4.8.5.2 Subtransmission Service Objective Alternatives

The proposed Mira Loma-Jefferson 66 kV subtransmission line is shown on **Figure 2-6** in Chapter 2, *Project Description*. Alternatives C1 and C2 are shown on **Figure 3-2a** and Alternative C3 is shown on **Figure 3-2b**, in Chapter 3, *Project Alternatives.*

Alternative B: Mira Loma-Jefferson 66 kV Subtransmission Line Without Substation

Under Alternative B, the proposed Mira Loma-Jefferson 66 kV Subtransmission Line would be constructed and the proposed Circle City Substation, its source lines, and the associated telecommunications facilities would not be constructed. Therefore, total emissions under Alternative B would be less than shown for the Project in Table 4.8-3, *Project Amortized Annual Emissions*. Therefore, Alternative B would not generate GHG emissions, either directly or indirectly, that would have a significant impact on the environment (Impact 4.8-1; Class III), and there would be no impact relative to a conflict with an applicable plan, policy, or regulation.

Alternative C1: Underground 66 kV Subtransmission Line along Hellman Avenue

Alternative C1 would have the same alignment as the proposed Mira Loma-Jefferson subtransmission line; however, it would include a half-mile-long underground conduit installation within Hellman Avenue. Underground subtransmission line conduit and vault construction activities tend to be more labor intensive and generate more GHG emissions per given distance than installation of overhead subtransmission line facilities; therefore, construction activities associated with Alternative C1 would generate emissions that would be greater than those that would be generated by the proposed Project. Based on the emissions calculations for the Project, it is estimated that the alternative would increase the construction schedule by approximately 2 weeks of additional underground line installation work, which would result in approximately 2 additional metric tons of amortized GHG emissions. Therefore, GHG emissions would be slightly greater overall under this alternative than the proposed Project, but the alternative would not generate GHG emissions, either directly or indirectly, that would have a significant impact on the environment (Impact 4.8-1; Class III), and there would be no impact relative to a conflict with an applicable plan, policy, or regulation.

Alternative C2: 66 kV Subtransmission Line along Archibald Avenue

The Alternative C2 segment from the SCE ROW down to River Road would be approximately 3.9 miles in length (2.7 miles aboveground and 1.2 mile underground) and would replace approximately 5.4 miles of overhead line that would be associated with the proposed Mira Loma-Jefferson subtransmission line. As mentioned above, underground subtransmission line conduit and vault construction activities generate more GHG emissions per a given distance than installation of overhead subtransmission line facilities; however, this alternative would be approximately 1.5 miles shorter than the proposed subtransmission line. Therefore, the construction activities associated with Alternative C2 would generate GHG emissions that would be similar to those of the proposed Project. The alternative would not generate GHG emissions, either directly or indirectly, that would have a significant impact on the environment (Impact 4.8-1; Class III), and there would be no impact relative to a conflict with an applicable plan, policy, or regulation.

Alternative C3: 66 kV Subtransmission-Level Battery Storage

Under Alternative C3, up to three subtransmission-level (66 kV) battery storage and substation facilities, associated subtransmission lines, and upgrades to existing Jefferson Substation, would be constructed and operated instead of the Mira Loma-Jefferson 66 kV line component of the Project.

Given the similarities of the infrastructure and site areas that would be required for the subtransmission-level battery storage and substation facilities under Alternative C3 and the proposed Circle City Substation, it is assumed that the total construction emissions associated with each of the three subtransmission-level battery storage and substation facilities would be similar to the total emissions that would be generated due to construction of the proposed Circle City Substation, and the subtransmission line connections to the 50 MW and 40 MW facilities would generate emissions similar to the emissions that would be generated by the proposed source lines, scaled to the length of the alternative lines, and that the subtransmission line connection to the 42 MW facility would generate emissions similar to those that would be generated by the proposed Mira Loma-Jefferson subtransmission line, scaled to the length of the alternative line. It is also assumed that operations of each of the three battery storage and substation facilities would result in the same amount of SF_6 released from circuit breakers into the environment as the proposed Circle City Substation; therefore, this alternative would result in three times the amount of SF_6 released into the atmosphere compared to the proposed Project. It is assumed that the electricity required to power the air conditioning units would be obtained internally and that each individual unit would be directly connected to the energy storage system's discharge and would not require additional electrical input; therefore, there would be no indirect GHG emissions associated with the air conditioners.

Using these assumptions, it is estimated that the total annual amortized emissions under Alternative C3 would be approximately 292 metric tons CO_2e per year (see Appendix D for calculations), which would be approximately two and a half times more emissions then generated under the proposed Project, but still substantially less than the significance threshold of 10,000 metric tons. The alternative would not generate GHG emissions, either directly or indirectly, that

would have a significant impact on the environment (Impact 4.8-1; Class III), and there would be no impact relative to a conflict with an applicable plan, policy, or regulation.

4.8.5.3 Distribution Service Objective Alternatives

The proposed Pedley and Databank 66 kV source lines and the proposed Circle City Substation are shown on **Figure 2-5**, in Chapter 2, *Project Description*. Alternative D1 is shown on **Figures 3-3** and **3-4** and Alternatives D2, E1, E2, E3, and E4 are shown on **Figure 3-6** in Chapter 3, *Project Alternatives.*

Alternative D1: 12 kV Distribution-Level Battery Storage

Under Alternative D1, a distribution-level (12 kV) battery storage facility would be constructed and operated instead of the Circle City Substation and associated sources lines components of the Project. The electricity required to power the air conditioning units would be obtained internally and each individual unit would be directly connected to the energy storage system's discharge and would not require additional electrical input; therefore, there would be no indirect GHG emissions associated with operation of the air conditioners. Given the reduced scope of the infrastructure and site area that would be required for the distribution-level battery storage facility under Alternative D1 compared to the proposed Circle City Substation, the total emissions under Alternative D1 would be less than shown for the Project in Table 4.8-3, *Project Amortized Annual Emissions*. Therefore, Alternative D1 would not generate GHG emissions, either directly or indirectly, that would have a significant impact on the environment (Impact 4.8-3; Class III), and there would be no impact relative to a conflict with an applicable plan, policy, or regulation.

Alternative D2: 66/12 kV Substation Site Alternative

Construction and operation of Alternative D2 would be similar in scope to that of the proposed Circle City Substation. The GHG-related impact that would be associated with this alternative would essentially be the same as identified for the proposed Project; the alternative would not generate GHG emissions, either directly or indirectly, that would have a significant impact on the environment Impact 4.8-1; Class III), and there would be no impact relative to a conflict with an applicable plan, policy, or regulation.

Alternative E1: Quarry Street 66 kV Source Line Segment

Alternative E1 would be approximately 300 feet longer and would include an additional 800 feet of underground line compared to the proposed Pedley Source Lines segment that it would replace. Underground subtransmission line conduit and vault construction activities generate more GHG emissions per a given distance than installation of overhead subtransmission line facilities; therefore, construction activities associated with Alternative E1 would generate emissions that would be greater than those that would be generated associated with the proposed Project. Based on the emissions calculations for the Project, it is estimated that the alternative would increase the construction schedule by 1 additional week of underground line installation work, which would result in less than 1 additional metric ton of amortized GHG emissions. Therefore, construction emissions would be slightly greater overall under this alternative than the proposed Project, but the alternative would not generate GHG emissions, either directly or

indirectly, that would have a significant impact on the environment (Impact 4.8-1; Class III) and there would be no impact relative to a conflict with an applicable plan, policy, or regulation.

Alternative E2: Underground Pedley 66 kV Source Lines from I-15 to Circle City Substation

Alternative E2 would have the same alignment as the proposed Pedley Source Lines; however, it includes an underground line segment from just west of Interstate 15 (I-15) to the proposed Circle City Substation site. This alternative would include approximately 1.5 miles of additional underground line compared to the proposed Pedley Source Lines. As mentioned above, underground subtransmission line conduit and vault construction activities generate more GHG emissions per a given distance than installation of overhead subtransmission line facilities; therefore, construction activities associated with Alternative E2 would generate emissions that would be greater than those that would be generated associated with the proposed Project. Based on the emissions calculations for the Project, it is estimated that the alternative would increase the construction schedule by an additional 4 to 7 weeks of underground line installation work, which would result in between 4 to 10 additional metric tons of amortized GHG emissions. Therefore, construction emissions would be slightly greater overall under this alternative than the proposed Project, but the alternative would not generate GHG emissions, either directly or indirectly, that would have a significant impact on the environment (Impact 4.8-1; Class III), and there would be no impact relative to a conflict with an applicable plan, policy, or regulation.

Alternative E3: Southern Route 66 kV Source Lines Alignment

Alternative E3 would include 1.3 miles of overhead lines in a double circuit configuration, which would be 0.1 mile longer than the proposed Databank Source Lines. However, unlike the proposed Databank Source Lines, which would include nearly 0.5 mile of underground subtransmission line installation, this alternative would include no underground line installation activities. Because underground subtransmission line conduit and vault construction activities generate more GHG emissions per a given distance than installation of overhead subtransmission line facilities, construction activities associated with Alternative E3 would generate less emissions than would be generated associated with the proposed Project. It is estimated that the alternative would decrease the construction schedule by approximately 3 weeks due to absence of underground line installation, which would result in fewer metric tons of amortized GHG emissions compared to the construction of the proposed Databank Source Lines. Therefore, construction emissions would be slightly less overall under this alternative than the proposed Project and the alternative would not generate GHG emissions, either directly or indirectly, that would have a significant impact on the environment (Impact 4.8-1; Class III), and there would be no impact relative to a conflict with an applicable plan, policy, or regulation.

Alternative E4: Databank 66 kV Source Lines Only

Alternative E4 would result in only the proposed Databank Source Lines and the Circle City Substation to Corona Substation telecommunications line being connected to Circle City Substation and the Pedley Source Lines would not be constructed. Construction activities associated with the Alternative E4 would generate less emissions than would be generated by the proposed Project. Therefore, construction emissions would be slightly less overall under this

alternative than the proposed Project and the GHG emissions impact would be less than significant (Impact 4.8-1; Class III) and there would be no impact relative to a conflict with an applicable plan, policy, or regulation.

References – Greenhouse Gas Emissions

California Air Resources Board (CARB), 2009. *Climate Change Scoping Plan: A Framework for Change*, December 2008, amended version included errata and Board requested modifications posted May 11, 2009.

CARB, 2014. First Update to the Climate Change Scoping Plan, Building on the Framework Pursuant to AB 32, the California Global Warming Solutions Act of 2006.

CARB, 2016a. Global Warming Potentials webpage, last reviewed June 17, 2016. Available online at: http://www.arb.ca.gov/cc/inventory/background/gwp.htm. Accessed December 5, 2016.

CARB, 2016b. Final Regulation Order to Adopt new Subarticle 3.1, Regulation for Reducing Sulfur Hexafluoride Emissions from Gas Insulated Switchgear sections 95350 to 95359, title 17, California Code of Regulations. Available online at: http://www.arb.ca.gov/cc/sf6elec/finalregulation.pdf, accessed December 5, 2016.

CARB, 2017a. California Greenhouse Gas Inventory for 2000–2015 – by Sector and Activity, last updated June 6, 2017. Available online at: http://www.arb.ca.gov/cc/inventory/data/tables/ghg_inventory_sector_sum_2000-15.pdf. Accessed June 8, 2017.

CARB, 2017b. California's 2017 Climate Change Scoping Plan, a strategy for achieving California's 2030 greenhouse gas target, November 2017.

California Energy Commission (CEC), 2005. *California's Water – Energy Relationship Prepared in Support of the 2005 Integrated Energy Policy Report Proceeding*, Final Staff Report, November 2005 (CEC-700-2005-011-SF). Table C-6, page 118.

City of Corona, 2012. City of Corona Climate Action Plan, January 2012.

City of Chino, 2013. City of Chino Climate Action Plan, November 19, 2013.

County of Riverside, 2015. County of Riverside Climate Action Plan, December 2015.

Intergovernmental Panel on Climate Change (IPCC), 2014. *Climate Change 2014, Impacts, Adaptation, and Vulnerability*. Summary for Policymakers, 2014.

Office of Governor Edmund G. Brown Jr., 2015. News Release – Governor Brown Established Most Ambitious Greenhouse Gas Reduction Target in North American, April 29, 2015.

South Coast Air Quality Management District (SCAQMD) 2008. Board Meeting Agenda Item No. 31, Interim CEQA GHG Significance Threshold for Stationary Sources, Rules, and Plans, December 5, 2008. Available online at: http://www.aqmd.gov/docs/default-

source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgboardsynopsis.pdf?sfvrsn=2. Accessed on June 22, 2016.

Southern California Edison (SCE), 2012. An Asset Management Approach for EPA/CARB SF6 Regulations, Robert Preston Lloyd, P.E., Senior Technical Specialist -Substation Compliance & Asset Management - Southern California Edison. April 2012.

SCE, 2015. Proponent's Environmental Assessment, Circle City Substation and Mira Loma-Jefferson 66kV Subtransmission Line Project, December 4, 2015.

SCE, 2016. Response to CPUC Data Request 6, Question 7, electronic file attachments. Provided to CPUC September 27, 2016.

The Climate Registry (TCR), 2016. 2016 Climate Registry Default Emissions Factors. April 19, 2016.

U.S. Environmental Protection Agency (USEPA), 2016a. Sources of Greenhouse Gas Emissions. Available online at: http://www.epa.gov/climatechange/ghgemissions/sources.html. Accessed June 28, 2016.

USEPA, 2016b. Clean Air Act Permitting for Greenhouse Gas Emissions webpage. Available online at: https://www.epa.gov/nsr/clean-air-act-permitting-greenhouse-gases. Accessed June 28, 2016.

USEPA, 2016c. Greenhouse Gas Reporting Program, Subpart DD – Use of Electric Transmission and Distribution Equipment, Rule Information. Available online at: https://www.epa.gov/ghgreporting/subpart-dd-use-electric-transmission-and-distribution-equipment, last updated November 30, 2016.

Exhibit B

Pacific Steel Group Mojave Micro Mill -- SCE Transmission and Telecommunications Project Construction Analysis
Construction Assumptions

Total Construction Site Area: acres

PROJECT CHARACTERISTICS

Project Name	SCE Transmission and Telecommunications	Project Construction Analysis
Project Location	Mojave Desert Air Basin	
CEC Zone	7	Mojave
Start of Construction	Apr-23	
Operational Year	2025	
Select Utility Company	Los Angeles Department of Water & Power	

LAND USE

Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Square Feet	Population	Notes:
Industrial	General Light Industry	1	1000 sq ft				Assuming 1000 sq ft per day (1 pole per day)

MITIGATION

Option	Yes/No	Frequency (per day)	PM10 % Reduction	PM2.5 % Reduction	
Soil Stabilizer for Unpaved Roads	No	n/a	n/a	n/a	
Water Exposed Area	Yes	2	55	55	*Default water mitigation*
Replace Ground Cover of Area Disturbed	No				
Tier 4 equipment	No				

From Data Request:

5. Construction Vehicles

Sources:

	Workers Per Day	Worker Trips (per day) *CalEEMod Defaults*	Vendor Trips (per day) *CalEEMod Defaults*	Haul Trips (max per day) *Assumption*	
Transmission	25	50		4	
Telecommunications	10	20		4	See *Material Imp_Exp* tab

Notes:

The CalEEMod default vendor trips assigned to the building construction phases (as well as assigning building construction phase types to electrical installation, etc.) is inherently conservative.

Haul trips for import/export and concrete/paving based on data request assumptions provided to ESA. Non-phase specific haul trips provided to ESA on a monthly schedule in the *Schedule_OFFROAD* tab.

Worker trips based on information provided to ESA.

Equipment Summary

Activity	CalEEMod Designation	Horsepower	New Equipment Quantity
Transmission	Air Compressor	120	2
Transmission	Aerial Lift	350	3
Transmission	Tractors/Loaders/Backhoes	200	1
Transmission	Crane	235	2
Transmission	other construction equipment	300	1
Transmission	Offhighway Truck	Default (402)	1
Telecommunications	Aerial Lift	350	1
Telecommunications	Generator Set	15	1
Telecommunications	Tractors/Loaders/Backhoes	200	1
Telecommunications	Offhighway Truck	Default (402)	1

Note: Based on Circle City DEIR information

Assuming 4 haul trips per day for any import/export.

Pacific Steel Group Mojave Micro Mill -- SCE Transmission and Telecommunications Project Construction Analysis

Construction Schedule - Offroad Equipment

Schedule Project 1 - Transmission Line

Phases	Phase Type	Number of Daily Workers	Start	Finish	# of Work Days	# of Days
Wood/H-Frame/LWS Pole Removal	Grading/Excavation	25	2024/01/01	2025/02/23	300	419
Install TSP Foundation	Grading/Excavation	25	2024/01/02	2025/02/24	300	419
TSP Haul	Grading/Excavation	25	2024/01/03	2025/02/25	300	419
TSP Erection	Grading/Excavation	25	2024/01/04	2025/02/26	300	419
Install Wood/LWS Pole	Grading/Excavation	25	2024/01/05	2025/02/27	300	419
Install Conductor	Grading/Excavation	25	2024/01/06	2025/02/28	300	419

Schedule Project 2 - Telecommunications Line

Phases	Phase Type	Number of Daily Workers	Start	Finish	# of Work Days	# of Days
Fiber Optic Cable Installation	Grading/Excavation	10	2024/01/01	2025/02/23	300	419
Fiber Optic Cable Splicing	Grading/Excavation	10	2024/01/02	2025/02/24	300	419
Underground Conduit	Grading/Excavation	10	2024/01/03	2025/02/25	300	419

Notes:

Assuming no demolition or architectural coating will be required based on information provided to ESA.

300 poles @ 1 pole per day

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	1.00	1000sqft	0.02	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	31
Climate Zone	7			**Operational Year**	2025
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	691.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Schedule based on 1 pole per day x 300 poles construction schedule for the transmission line.

Off-road Equipment - Equipment based on data from SCE Circle City DEIR.

Off-road Equipment - Equipment based on data from SCE Circle City DEIR.

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	2.00	300.00
tblConstructionPhase	NumDays	2.00	300.00
tblConstructionPhase	PhaseEndDate	1/12/2024	2/21/2025
tblConstructionPhase	PhaseEndDate	1/15/2024	2/21/2025

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tblConstructionPhase	PhaseStartDate	1/13/2024	1/1/2024
tblOffRoadEquipment	HorsePower	63.00	350.00
tblOffRoadEquipment	HorsePower	78.00	120.00
tblOffRoadEquipment	HorsePower	231.00	235.00
tblOffRoadEquipment	HorsePower	172.00	300.00
tblOffRoadEquipment	HorsePower	63.00	350.00
tblOffRoadEquipment	HorsePower	84.00	15.00
tblOffRoadEquipment	HorsePower	97.00	200.00
tblOffRoadEquipment	HorsePower	97.00	200.00
tblOffRoadEquipment	LoadFactor	0.31	0.41
tblOffRoadEquipment	OffRoadEquipmentType	Graders	Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType	Concrete/Industrial Saws	Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Other Construction Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

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Year	tons/yr										MT/yr					
2024	0.5546	4.3837	4.4926	0.0163	0.0370	0.1568	0.1938	9.8200e-003	0.1472	0.1571	0.0000	1,422.6915	1,422.6915	0.4123	8.2000e-004	1,433.2440
2025	0.0777	0.5817	0.6460	2.3600e-003	5.3600e-003	0.0204	0.0257	1.4200e-003	0.0191	0.0205	0.0000	206.2076	206.2076	0.0598	1.1000e-004	207.7344
Maximum	**0.5546**	**4.3837**	**4.4926**	**0.0163**	**0.0370**	**0.1568**	**0.1938**	**9.8200e-003**	**0.1472**	**0.1571**	**0.0000**	**1,422.6915**	**1,422.6915**	**0.4123**	**8.2000e-004**	**1,433.2440**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.5546	4.3837	4.4926	0.0163	0.0370	0.1568	0.1938	9.8200e-003	0.1472	0.1571	0.0000	1,422.6898	1,422.6898	0.4123	8.2000e-004	1,433.2424
2025	0.0777	0.5817	0.6460	2.3600e-003	5.3600e-003	0.0204	0.0257	1.4200e-003	0.0191	0.0205	0.0000	206.2073	206.2073	0.0598	1.1000e-004	207.7342
Maximum	**0.5546**	**4.3837**	**4.4926**	**0.0163**	**0.0370**	**0.1568**	**0.1938**	**9.8200e-003**	**0.1472**	**0.1571**	**0.0000**	**1,422.6898**	**1,422.6898**	**0.4123**	**8.2000e-004**	**1,433.2424**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2024	3-31-2024	1.2253	1.2253
2	4-1-2024	6-30-2024	1.2256	1.2256
3	7-1-2024	9-30-2024	1.2390	1.2390
4	10-1-2024	12-31-2024	1.2387	1.2387

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5	**1-1-2025**	**3-31-2025**	0.6446	0.6446
		Highest	1.2390	1.2390

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.0700e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	9.0000e-005	8.2000e-004	6.8000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	1.6156	1.6156	5.0000e-005	2.0000e-005	1.6230
Mobile	2.3300e-003	3.7500e-003	0.0223	5.0000e-005	5.0000e-003	4.0000e-005	5.0500e-003	1.3400e-003	4.0000e-005	1.3800e-003	0.0000	4.3877	4.3877	2.6000e-004	2.4000e-004	4.4660
Waste						0.0000	0.0000		0.0000	0.0000	0.2517	0.0000	0.2517	0.0149	0.0000	0.6236
Water						0.0000	0.0000		0.0000	0.0000	0.0734	0.9451	1.0185	7.5800e-003	1.8000e-004	1.2626
Total	**7.4900e-003**	**4.5700e-003**	**0.0230**	**5.0000e-005**	**5.0000e-003**	**1.0000e-004**	**5.1100e-003**	**1.3400e-003**	**1.0000e-004**	**1.4400e-003**	**0.3251**	**6.9485**	**7.2735**	**0.0228**	**4.4000e-004**	**7.9753**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.0700e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

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Energy	9.0000e-005	8.2000e-004	6.8000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	1.6156	1.6156	5.0000e-005	2.0000e-005	1.6230
Mobile	2.3300e-003	3.7500e-003	0.0223	5.0000e-005	5.0000e-003	4.0000e-005	5.0500e-003	1.3400e-003	4.0000e-005	1.3800e-003	0.0000	4.3877	4.3877	2.6000e-004	2.4000e-004	4.4660
Waste						0.0000	0.0000		0.0000	0.0000	0.2517	0.0000	0.2517	0.0149	0.0000	0.6236
Water						0.0000	0.0000		0.0000	0.0000	0.0734	0.9451	1.0185	7.5800e-003	1.8000e-004	1.2626
Total	**7.4900e-003**	**4.5700e-003**	**0.0230**	**5.0000e-005**	**5.0000e-003**	**1.0000e-004**	**5.1100e-003**	**1.3400e-003**	**1.0000e-004**	**1.4400e-003**	**0.3251**	**6.9485**	**7.2735**	**0.0228**	**4.4000e-004**	**7.9753**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Transmission	Grading	1/1/2024	2/21/2025	5	300	1 pole per day Transmission Line activities
2	Telecommunications	Grading	1/1/2024	2/21/2025	5	300	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Transmission	Aerial Lifts	3	8.00	350	0.41
Transmission	Air Compressors	2	8.00	120	0.48

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Transmission	Cranes	2	8.00	235	0.29
Transmission	Off-Highway Trucks	1	8.00	402	0.38
Transmission	Other Construction Equipment	1	8.00	300	0.42
Telecommunications	Aerial Lifts	1	8.00	350	0.31
Telecommunications	Generator Sets	1	8.00	15	0.74
Telecommunications	Off-Highway Trucks	1	8.00	402	0.38
Transmission	Tractors/Loaders/Backhoes	1	8.00	200	0.37
Telecommunications	Tractors/Loaders/Backhoes	1	8.00	200	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Transmission	10	25.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Telecommunications	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Transmission - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4116	3.4114	3.4313	0.0120		0.1246	0.1246		0.1173	0.1173	0.0000	1,049.1690	1,049.1690	0.3027	0.0000	1,056.7358

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Total	**0.4116**	**3.4114**	**3.4313**	**0.0120**	**0.0000**	**0.1246**	**0.1246**	**0.0000**	**0.1173**	**0.1173**	**0.0000**	**1,049.1690**	**1,049.1690**	**0.3027**	**0.0000**	**1,056.7358**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.2900e-003	6.3700e-003	0.0764	2.2000e-004	0.0264	1.3000e-004	0.0265	7.0100e-003	1.2000e-004	7.1300e-003	0.0000	19.9313	19.9313	6.0000e-004	5.9000e-004	20.1215
Total	**9.2900e-003**	**6.3700e-003**	**0.0764**	**2.2000e-004**	**0.0264**	**1.3000e-004**	**0.0265**	**7.0100e-003**	**1.2000e-004**	**7.1300e-003**	**0.0000**	**19.9313**	**19.9313**	**6.0000e-004**	**5.9000e-004**	**20.1215**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4116	3.4114	3.4313	0.0120		0.1246	0.1246		0.1173	0.1173	0.0000	1,049.1678	1,049.1678	0.3027	0.0000	1,056.7345

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Total	**0.4116**	**3.4114**	**3.4313**	**0.0120**	**0.0000**	**0.1246**	**0.1246**	**0.0000**	**0.1173**	**0.1173**	**0.0000**	**1,049.1678**	**1,049.1678**	**0.3027**	**0.0000**	**1,056.7345**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.2900e-003	6.3700e-003	0.0764	2.2000e-004	0.0264	1.3000e-004	0.0265	7.0100e-003	1.2000e-004	7.1300e-003	0.0000	19.9313	19.9313	6.0000e-004	5.9000e-004	20.1215
Total	**9.2900e-003**	**6.3700e-003**	**0.0764**	**2.2000e-004**	**0.0264**	**1.3000e-004**	**0.0265**	**7.0100e-003**	**1.2000e-004**	**7.1300e-003**	**0.0000**	**19.9313**	**19.9313**	**6.0000e-004**	**5.9000e-004**	**20.1215**

3.2 Transmission - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0577	0.4560	0.4944	1.7400e-003		0.0162	0.0162		0.0152	0.0152	0.0000	152.1668	152.1668	0.0439	0.0000	153.2633

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Total	**0.0577**	**0.4560**	**0.4944**	**1.7400e-003**	**0.0000**	**0.0162**	**0.0162**	**0.0000**	**0.0152**	**0.0152**	**0.0000**	**152.1668**	**152.1668**	**0.0439**	**0.0000**	**153.2633**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2500e-003	8.3000e-004	0.0103	3.0000e-005	3.8300e-003	2.0000e-005	3.8500e-003	1.0200e-003	2.0000e-005	1.0300e-003	0.0000	2.7923	2.7923	8.0000e-005	8.0000e-005	2.8179
Total	**1.2500e-003**	**8.3000e-004**	**0.0103**	**3.0000e-005**	**3.8300e-003**	**2.0000e-005**	**3.8500e-003**	**1.0200e-003**	**2.0000e-005**	**1.0300e-003**	**0.0000**	**2.7923**	**2.7923**	**8.0000e-005**	**8.0000e-005**	**2.8179**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0577	0.4560	0.4944	1.7400e-003		0.0162	0.0162		0.0152	0.0152	0.0000	152.1666	152.1666	0.0439	0.0000	153.2631

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Total	**0.0577**	**0.4560**	**0.4944**	**1.7400e-003**	**0.0000**	**0.0162**	**0.0162**	**0.0000**	**0.0152**	**0.0152**	**0.0000**	**152.1666**	**152.1666**	**0.0439**	**0.0000**	**153.2631**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2500e-003	8.3000e-004	0.0103	3.0000e-005	3.8300e-003	2.0000e-005	3.8500e-003	1.0200e-003	2.0000e-005	1.0300e-003	0.0000	2.7923	2.7923	8.0000e-005	8.0000e-005	2.8179
Total	**1.2500e-003**	**8.3000e-004**	**0.0103**	**3.0000e-005**	**3.8300e-003**	**2.0000e-005**	**3.8500e-003**	**1.0200e-003**	**2.0000e-005**	**1.0300e-003**	**0.0000**	**2.7923**	**2.7923**	**8.0000e-005**	**8.0000e-005**	**2.8179**

3.3 Telecommunications - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1300	0.9634	0.9544	3.9900e-003		0.0320	0.0320		0.0298	0.0298	0.0000	345.6185	345.6185	0.1088	0.0000	348.3381

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Total	**0.1300**	**0.9634**	**0.9544**	**3.9900e-003**	**0.0000**	**0.0320**	**0.0320**	**0.0000**	**0.0298**	**0.0298**	**0.0000**	**345.6185**	**345.6185**	**0.1088**	**0.0000**	**348.3381**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7200e-003	2.5500e-003	0.0305	9.0000e-005	0.0106	5.0000e-005	0.0106	2.8100e-003	5.0000e-005	2.8500e-003	0.0000	7.9725	7.9725	2.4000e-004	2.3000e-004	8.0486
Total	**3.7200e-003**	**2.5500e-003**	**0.0305**	**9.0000e-005**	**0.0106**	**5.0000e-005**	**0.0106**	**2.8100e-003**	**5.0000e-005**	**2.8500e-003**	**0.0000**	**7.9725**	**7.9725**	**2.4000e-004**	**2.3000e-004**	**8.0486**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1300	0.9634	0.9544	3.9900e-003		0.0320	0.0320		0.0298	0.0298	0.0000	345.6181	345.6181	0.1088	0.0000	348.3377

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Total	**0.1300**	**0.9634**	**0.9544**	**3.9900e-003**	**0.0000**	**0.0320**	**0.0320**	**0.0000**	**0.0298**	**0.0298**	**0.0000**	**345.6181**	**345.6181**	**0.1088**	**0.0000**	**348.3377**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7200e-003	2.5500e-003	0.0305	9.0000e-005	0.0106	5.0000e-005	0.0106	2.8100e-003	5.0000e-005	2.8500e-003	0.0000	7.9725	7.9725	2.4000e-004	2.3000e-004	8.0486
Total	**3.7200e-003**	**2.5500e-003**	**0.0305**	**9.0000e-005**	**0.0106**	**5.0000e-005**	**0.0106**	**2.8100e-003**	**5.0000e-005**	**2.8500e-003**	**0.0000**	**7.9725**	**7.9725**	**2.4000e-004**	**2.3000e-004**	**8.0486**

3.3 Telecommunications - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0182	0.1245	0.1372	5.8000e-004		4.1200e-003	4.1200e-003		3.8500e-003	3.8500e-003	0.0000	50.1316	50.1316	0.0158	0.0000	50.5260

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Total	**0.0182**	**0.1245**	**0.1372**	**5.8000e-004**	**0.0000**	**4.1200e-003**	**4.1200e-003**	**0.0000**	**3.8500e-003**	**3.8500e-003**	**0.0000**	**50.1316**	**50.1316**	**0.0158**	**0.0000**	**50.5260**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-004	3.3000e-004	4.1100e-003	1.0000e-005	1.5300e-003	1.0000e-005	1.5400e-003	4.1000e-004	1.0000e-005	4.1000e-004	0.0000	1.1169	1.1169	3.0000e-005	3.0000e-005	1.1272
Total	**5.0000e-004**	**3.3000e-004**	**4.1100e-003**	**1.0000e-005**	**1.5300e-003**	**1.0000e-005**	**1.5400e-003**	**4.1000e-004**	**1.0000e-005**	**4.1000e-004**	**0.0000**	**1.1169**	**1.1169**	**3.0000e-005**	**3.0000e-005**	**1.1272**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0182	0.1245	0.1372	5.8000e-004		4.1200e-003	4.1200e-003		3.8500e-003	3.8500e-003	0.0000	50.1316	50.1316	0.0158	0.0000	50.5260

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Total	**0.0182**	**0.1245**	**0.1372**	**5.8000e-004**	**0.0000**	**4.1200e-003**	**4.1200e-003**	**0.0000**	**3.8500e-003**	**3.8500e-003**	**0.0000**	**50.1316**	**50.1316**	**0.0158**	**0.0000**	**50.5260**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-004	3.3000e-004	4.1100e-003	1.0000e-005	1.5300e-003	1.0000e-005	1.5400e-003	4.1000e-004	1.0000e-005	4.1000e-004	0.0000	1.1169	1.1169	3.0000e-005	3.0000e-005	1.1272
Total	**5.0000e-004**	**3.3000e-004**	**4.1100e-003**	**1.0000e-005**	**1.5300e-003**	**1.0000e-005**	**1.5400e-003**	**4.1000e-004**	**1.0000e-005**	**4.1000e-004**	**0.0000**	**1.1169**	**1.1169**	**3.0000e-005**	**3.0000e-005**	**1.1272**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Category	tons/yr									MT/yr					
Mitigated	2.3300e-003	3.7500e-003	0.0223	5.0000e-005	5.0000e-003	4.0000e-005	5.0500e-003	1.3400e-003	4.0000e-005	1.3800e-003	0.0000	4.3877	4.3877	2.6000e-004	2.4000e-004	4.4660
Unmitigated	2.3300e-003	3.7500e-003	0.0223	5.0000e-005	5.0000e-003	4.0000e-005	5.0500e-003	1.3400e-003	4.0000e-005	1.3800e-003	0.0000	4.3877	4.3877	2.6000e-004	2.4000e-004	4.4660

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	4.96	1.99	5.00	13,259	13,259
Total	4.96	1.99	5.00	13,259	13,259

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.535455	0.056260	0.172409	0.133149	0.028776	0.007661	0.007273	0.023440	0.000521	0.000192	0.028266	0.001153	0.005445

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.7282	0.7282	3.0000e-005	0.0000	0.7303
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.7282	0.7282	3.0000e-005	0.0000	0.7303
NaturalGas Mitigated	9.0000e-005	8.2000e-004	6.8000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.8874	0.8874	2.0000e-005	2.0000e-005	0.8927
NaturalGas Unmitigated	9.0000e-005	8.2000e-004	6.8000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.8874	0.8874	2.0000e-005	2.0000e-005	0.8927

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	16630	9.0000e-005	8.2000e-004	6.8000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.8874	0.8874	2.0000e-005	2.0000e-005	0.8927
Total		**9.0000e-005**	**8.2000e-004**	**6.8000e-004**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**	**0.0000**	**0.8874**	**0.8874**	**2.0000e-005**	**2.0000e-005**	**0.8927**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	kBTU/yr	tons/yr									MT/yr					
General Light Industry	16630	9.0000e-005	8.2000e-004	6.8000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.8874	0.8874	2.0000e-005	2.0000e-005	0.8927
Total		**9.0000e-005**	**8.2000e-004**	**6.8000e-004**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**	**0.0000**	**0.8874**	**0.8874**	**2.0000e-005**	**2.0000e-005**	**0.8927**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	2320	0.7282	3.0000e-005	0.0000	0.7303
Total		**0.7282**	**3.0000e-005**	**0.0000**	**0.7303**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	2320	0.7282	3.0000e-005	0.0000	0.7303
Total		**0.7282**	**3.0000e-005**	**0.0000**	**0.7303**

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	5.0700e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Unmitigated	5.0700e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.1600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.9100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Total	**5.0700e-003**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.1600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.9100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	**5.0700e-003**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated	1.0185	7.5800e-003	1.8000e-004	1.2626
Unmitigated	1.0185	7.5800e-003	1.8000e-004	1.2626

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.23125 / 0	1.0185	7.5800e-003	1.8000e-004	1.2626
Total		**1.0185**	**7.5800e-003**	**1.8000e-004**	**1.2626**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.23125 / 0	1.0185	7.5800e-003	1.8000e-004	1.2626
Total		**1.0185**	**7.5800e-003**	**1.8000e-004**	**1.2626**

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.2517	0.0149	0.0000	0.6236
Unmitigated	0.2517	0.0149	0.0000	0.6236

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	1.24	0.2517	0.0149	0.0000	0.6236
Total		**0.2517**	**0.0149**	**0.0000**	**0.6236**

Mitigated

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	1.24	0.2517	0.0149	0.0000	0.6236
Total		**0.2517**	**0.0149**	**0.0000**	**0.6236**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

MMM SCE Transmission & Telecommunication Projects (2024 Construction)

Mojave Desert Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	1.00	1000sqft	0.02	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	31
Climate Zone	7			**Operational Year**	2025
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	691.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Schedule based on 1 pole per day x 300 poles construction schedule for the transmission line.

Off-road Equipment - Equipment based on data from SCE Circle City DEIR.

Off-road Equipment - Equipment based on data from SCE Circle City DEIR.

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	2.00	300.00
tblConstructionPhase	NumDays	2.00	300.00
tblConstructionPhase	PhaseEndDate	1/12/2024	2/21/2025
tblConstructionPhase	PhaseEndDate	1/15/2024	2/21/2025

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblConstructionPhase	PhaseStartDate	1/13/2024	1/1/2024
tblOffRoadEquipment	HorsePower	63.00	350.00
tblOffRoadEquipment	HorsePower	78.00	120.00
tblOffRoadEquipment	HorsePower	231.00	235.00
tblOffRoadEquipment	HorsePower	172.00	300.00
tblOffRoadEquipment	HorsePower	63.00	350.00
tblOffRoadEquipment	HorsePower	84.00	15.00
tblOffRoadEquipment	HorsePower	97.00	200.00
tblOffRoadEquipment	HorsePower	97.00	200.00
tblOffRoadEquipment	LoadFactor	0.31	0.41
tblOffRoadEquipment	OffRoadEquipmentType	Graders	Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType	Concrete/Industrial Saws	Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Other Construction Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Year	lb/day										lb/day					
2024	4.2526	33.4576	34.4264	0.1245	0.2875	1.1969	1.4844	0.0763	1.1239	1.2002	0.0000	11,993.2337	11,993.2337	3.4690	6.5100e-003	12,081.8999
2025	4.1063	30.6097	34.1201	0.1244	0.2875	1.0713	1.3588	0.0763	1.0053	1.0815	0.0000	11,984.4894	11,984.4894	3.4661	6.0600e-003	12,072.9505
Maximum	**4.2526**	**33.4576**	**34.4264**	**0.1245**	**0.2875**	**1.1969**	**1.4844**	**0.0763**	**1.1239**	**1.2002**	**0.0000**	**11,993.2337**	**11,993.2337**	**3.4690**	**6.5100e-003**	**12,081.8999**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	4.2526	33.4576	34.4264	0.1245	0.2875	1.1969	1.4844	0.0763	1.1239	1.2002	0.0000	11,993.2337	11,993.2337	3.4690	6.5100e-003	12,081.8999
2025	4.1063	30.6097	34.1201	0.1244	0.2875	1.0713	1.3588	0.0763	1.0053	1.0815	0.0000	11,984.4893	11,984.4893	3.4661	6.0600e-003	12,072.9505
Maximum	**4.2526**	**33.4576**	**34.4264**	**0.1245**	**0.2875**	**1.1969**	**1.4844**	**0.0763**	**1.1239**	**1.2002**	**0.0000**	**11,993.2337**	**11,993.2337**	**3.4690**	**6.5100e-003**	**12,081.8999**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0278	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	4.9000e-004	4.4700e-003	3.7500e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.3602	5.3602	1.0000e-004	1.0000e-004	5.3921
Mobile	0.0172	0.0209	0.1445	3.1000e-004	0.0308	2.6000e-004	0.0311	8.2200e-003	2.4000e-004	8.4700e-003		31.2743	31.2743	1.6400e-003	1.5500e-003	31.7772
Total	**0.0454**	**0.0254**	**0.1484**	**3.4000e-004**	**0.0308**	**6.0000e-004**	**0.0314**	**8.2200e-003**	**5.8000e-004**	**8.8100e-003**		**36.6347**	**36.6347**	**1.7400e-003**	**1.6500e-003**	**37.1695**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0278	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	4.9000e-004	4.4700e-003	3.7500e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.3602	5.3602	1.0000e-004	1.0000e-004	5.3921
Mobile	0.0172	0.0209	0.1445	3.1000e-004	0.0308	2.6000e-004	0.0311	8.2200e-003	2.4000e-004	8.4700e-003		31.2743	31.2743	1.6400e-003	1.5500e-003	31.7772
Total	**0.0454**	**0.0254**	**0.1484**	**3.4000e-004**	**0.0308**	**6.0000e-004**	**0.0314**	**8.2200e-003**	**5.8000e-004**	**8.8100e-003**		**36.6347**	**36.6347**	**1.7400e-003**	**1.6500e-003**	**37.1695**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Transmission	Grading	1/1/2024	2/21/2025	5	300	1 pole per day Transmission Line activities
2	Telecommunications	Grading	1/1/2024	2/21/2025	5	300	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Transmission	Aerial Lifts	3	8.00	350	0.41
Transmission	Air Compressors	2	8.00	120	0.48
Transmission	Cranes	2	8.00	235	0.29
Transmission	Off-Highway Trucks	1	8.00	402	0.38
Transmission	Other Construction Equipment	1	8.00	300	0.42
Telecommunications	Aerial Lifts	1	8.00	350	0.31
Telecommunications	Generator Sets	1	8.00	15	0.74
Telecommunications	Off-Highway Trucks	1	8.00	402	0.38
Transmission	Tractors/Loaders/Backhoes	1	8.00	200	0.37
Telecommunications	Tractors/Loaders/Backhoes	1	8.00	200	0.37

Trips and VMT

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Transmission	10	25.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Telecommunications	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Transmission - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	3.1422	26.0412	26.1934	0.0915		0.9513	0.9513		0.8952	0.8952		8,828.3275	8,828.3275	2.5468		8,891.9984
Total	**3.1422**	**26.0412**	**26.1934**	**0.0915**	**0.0000**	**0.9513**	**0.9513**	**0.0000**	**0.8952**	**0.8952**		**8,828.3275**	**8,828.3275**	**2.5468**		**8,891.9984**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0845	0.0443	0.6768	1.8100e-003	0.2054	9.6000e-004	0.2063	0.0545	8.8000e-004	0.0554		183.3342	183.3342	4.8500e-003	4.6500e-003	184.8421
Total	**0.0845**	**0.0443**	**0.6768**	**1.8100e-003**	**0.2054**	**9.6000e-004**	**0.2063**	**0.0545**	**8.8000e-004**	**0.0554**		**183.3342**	**183.3342**	**4.8500e-003**	**4.6500e-003**	**184.8421**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	3.1422	26.0412	26.1934	0.0915		0.9513	0.9513		0.8952	0.8952	0.0000	8,828.3275	8,828.3275	2.5468		8,891.9984
Total	**3.1422**	**26.0412**	**26.1934**	**0.0915**	**0.0000**	**0.9513**	**0.9513**	**0.0000**	**0.8952**	**0.8952**	**0.0000**	**8,828.3275**	**8,828.3275**	**2.5468**		**8,891.9984**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0845	0.0443	0.6768	1.8100e-003	0.2054	9.6000e-004	0.2063	0.0545	8.8000e-004	0.0554		183.3342	183.3342	4.8500e-003	4.6500e-003	184.8421
Total	**0.0845**	**0.0443**	**0.6768**	**1.8100e-003**	**0.2054**	**9.6000e-004**	**0.2063**	**0.0545**	**8.8000e-004**	**0.0554**		**183.3342**	**183.3342**	**4.8500e-003**	**4.6500e-003**	**184.8421**

3.2 Transmission - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	3.0361	23.9994	26.0221	0.0915		0.8530	0.8530		0.8016	0.8016		8,828.1653	8,828.1653	2.5448		8,891.7841
Total	**3.0361**	**23.9994**	**26.0221**	**0.0915**	**0.0000**	**0.8530**	**0.8530**	**0.0000**	**0.8016**	**0.8016**		**8,828.1653**	**8,828.1653**	**2.5448**		**8,891.7841**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0785	0.0396	0.6264	1.7500e-003	0.2054	9.1000e-004	0.2063	0.0545	8.4000e-004	0.0553		177.0491	177.0491	4.3700e-003	4.3300e-003	178.4500
Total	**0.0785**	**0.0396**	**0.6264**	**1.7500e-003**	**0.2054**	**9.1000e-004**	**0.2063**	**0.0545**	**8.4000e-004**	**0.0553**		**177.0491**	**177.0491**	**4.3700e-003**	**4.3300e-003**	**178.4500**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	3.0361	23.9994	26.0221	0.0915		0.8530	0.8530		0.8016	0.8016	0.0000	8,828.1653	8,828.1653	2.5448		8,891.7841
Total	**3.0361**	**23.9994**	**26.0221**	**0.0915**	**0.0000**	**0.8530**	**0.8530**	**0.0000**	**0.8016**	**0.8016**	**0.0000**	**8,828.1653**	**8,828.1653**	**2.5448**		**8,891.7841**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0785	0.0396	0.6264	1.7500e-003	0.2054	9.1000e-004	0.2063	0.0545	8.4000e-004	0.0553		177.0491	177.0491	4.3700e-003	4.3300e-003	178.4500
Total	**0.0785**	**0.0396**	**0.6264**	**1.7500e-003**	**0.2054**	**9.1000e-004**	**0.2063**	**0.0545**	**8.4000e-004**	**0.0553**		**177.0491**	**177.0491**	**4.3700e-003**	**4.3300e-003**	**178.4500**

3.3 Telecommunications - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.9921	7.3544	7.2855	0.0305		0.2442	0.2442		0.2275	0.2275		2,908.2383	2,908.2383	0.9154		2,931.1225
Total	**0.9921**	**7.3544**	**7.2855**	**0.0305**	**0.0000**	**0.2442**	**0.2442**	**0.0000**	**0.2275**	**0.2275**		**2,908.2383**	**2,908.2383**	**0.9154**		**2,931.1225**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0338	0.0177	0.2707	7.3000e-004	0.0822	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		73.3337	73.3337	1.9400e-003	1.8600e-003	73.9369
Total	**0.0338**	**0.0177**	**0.2707**	**7.3000e-004**	**0.0822**	**3.8000e-004**	**0.0825**	**0.0218**	**3.5000e-004**	**0.0221**		**73.3337**	**73.3337**	**1.9400e-003**	**1.8600e-003**	**73.9369**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.9921	7.3544	7.2855	0.0305		0.2442	0.2442		0.2275	0.2275	0.0000	2,908.2383	2,908.2383	0.9154		2,931.1225
Total	**0.9921**	**7.3544**	**7.2855**	**0.0305**	**0.0000**	**0.2442**	**0.2442**	**0.0000**	**0.2275**	**0.2275**	**0.0000**	**2,908.2383**	**2,908.2383**	**0.9154**		**2,931.1225**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0338	0.0177	0.2707	7.3000e-004	0.0822	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		73.3337	73.3337	1.9400e-003	1.8600e-003	73.9369
Total	**0.0338**	**0.0177**	**0.2707**	**7.3000e-004**	**0.0822**	**3.8000e-004**	**0.0825**	**0.0218**	**3.5000e-004**	**0.0221**		**73.3337**	**73.3337**	**1.9400e-003**	**1.8600e-003**	**73.9369**

3.3 Telecommunications - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.9603	6.5549	7.2210	0.0305		0.2170	0.2170		0.2025	0.2025		2,908.4552	2,908.4552	0.9152		2,931.3363
Total	**0.9603**	**6.5549**	**7.2210**	**0.0305**	**0.0000**	**0.2170**	**0.2170**	**0.0000**	**0.2025**	**0.2025**		**2,908.4552**	**2,908.4552**	**0.9152**		**2,931.3363**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0314	0.0158	0.2506	7.0000e-004	0.0822	3.6000e-004	0.0825	0.0218	3.4000e-004	0.0221		70.8197	70.8197	1.7500e-003	1.7300e-003	71.3800
Total	**0.0314**	**0.0158**	**0.2506**	**7.0000e-004**	**0.0822**	**3.6000e-004**	**0.0825**	**0.0218**	**3.4000e-004**	**0.0221**		**70.8197**	**70.8197**	**1.7500e-003**	**1.7300e-003**	**71.3800**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.9603	6.5549	7.2210	0.0305		0.2170	0.2170		0.2025	0.2025	0.0000	2,908.4552	2,908.4552	0.9152		2,931.3363
Total	**0.9603**	**6.5549**	**7.2210**	**0.0305**	**0.0000**	**0.2170**	**0.2170**	**0.0000**	**0.2025**	**0.2025**	**0.0000**	**2,908.4552**	**2,908.4552**	**0.9152**		**2,931.3363**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0314	0.0158	0.2506	7.0000e-004	0.0822	3.6000e-004	0.0825	0.0218	3.4000e-004	0.0221		70.8197	70.8197	1.7500e-003	1.7300e-003	71.3800
Total	**0.0314**	**0.0158**	**0.2506**	**7.0000e-004**	**0.0822**	**3.6000e-004**	**0.0825**	**0.0218**	**3.4000e-004**	**0.0221**		**70.8197**	**70.8197**	**1.7500e-003**	**1.7300e-003**	**71.3800**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0172	0.0209	0.1445	3.1000e-004	0.0308	2.6000e-004	0.0311	8.2200e-003	2.4000e-004	8.4700e-003		31.2743	31.2743	1.6400e-003	1.5500e-003	31.7772
Unmitigated	0.0172	0.0209	0.1445	3.1000e-004	0.0308	2.6000e-004	0.0311	8.2200e-003	2.4000e-004	8.4700e-003		31.2743	31.2743	1.6400e-003	1.5500e-003	31.7772

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	4.96	1.99	5.00	13,259	13,259
Total	4.96	1.99	5.00	13,259	13,259

4.3 Trip Type Information

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.535455	0.056260	0.172409	0.133149	0.028776	0.007661	0.007273	0.023440	0.000521	0.000192	0.028266	0.001153	0.005445

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	4.9000e-004	4.4700e-003	3.7500e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.3602	5.3602	1.0000e-004	1.0000e-004	5.3921
NaturalGas Unmitigated	4.9000e-004	4.4700e-003	3.7500e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.3602	5.3602	1.0000e-004	1.0000e-004	5.3921

5.2 Energy by Land Use - NaturalGas

Unmitigated

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	45.5616	4.9000e-004	4.4700e-003	3.7500e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.3602	5.3602	1.0000e-004	1.0000e-004	5.3921
Total		**4.9000e-004**	**4.4700e-003**	**3.7500e-003**	**3.0000e-005**		**3.4000e-004**	**3.4000e-004**		**3.4000e-004**	**3.4000e-004**		**5.3602**	**5.3602**	**1.0000e-004**	**1.0000e-004**	**5.3921**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0.0455616	4.9000e-004	4.4700e-003	3.7500e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.3602	5.3602	1.0000e-004	1.0000e-004	5.3921
Total		**4.9000e-004**	**4.4700e-003**	**3.7500e-003**	**3.0000e-005**		**3.4000e-004**	**3.4000e-004**		**3.4000e-004**	**3.4000e-004**		**5.3602**	**5.3602**	**1.0000e-004**	**1.0000e-004**	**5.3921**

6.0 Area Detail

6.1 Mitigation Measures Area

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0278	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	0.0278	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	6.3500e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0214					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	**0.0278**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

SubCategory	lb/day										lb/day					
Architectural Coating	6.3500e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0214					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	**0.0278**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Equipment Type	Number

11.0 Vegetation

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

MMM SCE Transmission & Telecommunication Projects (2024 Construction)

Mojave Desert Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	1.00	1000sqft	0.02	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	31
Climate Zone	7			**Operational Year**	2025
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	691.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Schedule based on 1 pole per day x 300 poles construction schedule for the transmission line.

Off-road Equipment - Equipment based on data from SCE Circle City DEIR.

Off-road Equipment - Equipment based on data from SCE Circle City DEIR.

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	2.00	300.00
tblConstructionPhase	NumDays	2.00	300.00
tblConstructionPhase	PhaseEndDate	1/12/2024	2/21/2025
tblConstructionPhase	PhaseEndDate	1/15/2024	2/21/2025

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblConstructionPhase	PhaseStartDate	1/13/2024	1/1/2024
tblOffRoadEquipment	HorsePower	63.00	350.00
tblOffRoadEquipment	HorsePower	78.00	120.00
tblOffRoadEquipment	HorsePower	231.00	235.00
tblOffRoadEquipment	HorsePower	172.00	300.00
tblOffRoadEquipment	HorsePower	63.00	350.00
tblOffRoadEquipment	HorsePower	84.00	15.00
tblOffRoadEquipment	HorsePower	97.00	200.00
tblOffRoadEquipment	HorsePower	97.00	200.00
tblOffRoadEquipment	LoadFactor	0.31	0.41
tblOffRoadEquipment	OffRoadEquipmentType	Graders	Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType	Concrete/Industrial Saws	Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Other Construction Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Year	lb/day										lb/day					
2024	4.2408	33.4598	34.2411	0.1242	0.2875	1.1969	1.4844	0.0763	1.1239	1.2002	0.0000	11,964.9864	11,964.9864	3.4692	6.6500e-003	12,053.6972
2025	4.0955	30.6116	33.9501	0.1241	0.2875	1.0713	1.3588	0.0763	1.0053	1.0815	0.0000	11,957.2726	11,957.2726	3.4663	6.1900e-003	12,045.7753
Maximum	**4.2408**	**33.4598**	**34.2411**	**0.1242**	**0.2875**	**1.1969**	**1.4844**	**0.0763**	**1.1239**	**1.2002**	**0.0000**	**11,964.9864**	**11,964.9864**	**3.4692**	**6.6500e-003**	**12,053.6972**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	4.2408	33.4598	34.2411	0.1242	0.2875	1.1969	1.4844	0.0763	1.1239	1.2002	0.0000	11,964.9864	11,964.9864	3.4692	6.6500e-003	12,053.6972
2025	4.0955	30.6116	33.9501	0.1241	0.2875	1.0713	1.3588	0.0763	1.0053	1.0815	0.0000	11,957.2726	11,957.2726	3.4663	6.1900e-003	12,045.7753
Maximum	**4.2408**	**33.4598**	**34.2411**	**0.1242**	**0.2875**	**1.1969**	**1.4844**	**0.0763**	**1.1239**	**1.2002**	**0.0000**	**11,964.9864**	**11,964.9864**	**3.4692**	**6.6500e-003**	**12,053.6972**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0278	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	4.9000e-004	4.4700e-003	3.7500e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.3602	5.3602	1.0000e-004	1.0000e-004	5.3921
Mobile	0.0142	0.0223	0.1278	2.8000e-004	0.0308	2.6000e-004	0.0311	8.2200e-003	2.4000e-004	8.4700e-003		28.7148	28.7148	1.6900e-003	1.5800e-003	29.2289
Total	**0.0424**	**0.0267**	**0.1316**	**3.1000e-004**	**0.0308**	**6.0000e-004**	**0.0314**	**8.2200e-003**	**5.8000e-004**	**8.8100e-003**		**34.0752**	**34.0752**	**1.7900e-003**	**1.6800e-003**	**34.6212**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0278	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	4.9000e-004	4.4700e-003	3.7500e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.3602	5.3602	1.0000e-004	1.0000e-004	5.3921
Mobile	0.0142	0.0223	0.1278	2.8000e-004	0.0308	2.6000e-004	0.0311	8.2200e-003	2.4000e-004	8.4700e-003		28.7148	28.7148	1.6900e-003	1.5800e-003	29.2289
Total	**0.0424**	**0.0267**	**0.1316**	**3.1000e-004**	**0.0308**	**6.0000e-004**	**0.0314**	**8.2200e-003**	**5.8000e-004**	**8.8100e-003**		**34.0752**	**34.0752**	**1.7900e-003**	**1.6800e-003**	**34.6212**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Transmission	Grading	1/1/2024	2/21/2025	5	300	1 pole per day Transmission Line activities
2	Telecommunications	Grading	1/1/2024	2/21/2025	5	300	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Transmission	Aerial Lifts	3	8.00	350	0.41
Transmission	Air Compressors	2	8.00	120	0.48
Transmission	Cranes	2	8.00	235	0.29
Transmission	Off-Highway Trucks	1	8.00	402	0.38
Transmission	Other Construction Equipment	1	8.00	300	0.42
Telecommunications	Aerial Lifts	1	8.00	350	0.31
Telecommunications	Generator Sets	1	8.00	15	0.74
Telecommunications	Off-Highway Trucks	1	8.00	402	0.38
Transmission	Tractors/Loaders/Backhoes	1	8.00	200	0.37
Telecommunications	Tractors/Loaders/Backhoes	1	8.00	200	0.37

Trips and VMT

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Transmission	10	25.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Telecommunications	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Transmission - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	3.1422	26.0412	26.1934	0.0915		0.9513	0.9513		0.8952	0.8952		8,828.3275	8,828.3275	2.5468		8,891.9984
Total	**3.1422**	**26.0412**	**26.1934**	**0.0915**	**0.0000**	**0.9513**	**0.9513**	**0.0000**	**0.8952**	**0.8952**		**8,828.3275**	**8,828.3275**	**2.5468**		**8,891.9984**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0761	0.0459	0.5444	1.6100e-003	0.2054	9.6000e-004	0.2063	0.0545	8.8000e-004	0.0554		163.1576	163.1576	4.9600e-003	4.7500e-003	164.6973
Total	**0.0761**	**0.0459**	**0.5444**	**1.6100e-003**	**0.2054**	**9.6000e-004**	**0.2063**	**0.0545**	**8.8000e-004**	**0.0554**		**163.1576**	**163.1576**	**4.9600e-003**	**4.7500e-003**	**164.6973**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	3.1422	26.0412	26.1934	0.0915		0.9513	0.9513		0.8952	0.8952	0.0000	8,828.3275	8,828.3275	2.5468		8,891.9984
Total	**3.1422**	**26.0412**	**26.1934**	**0.0915**	**0.0000**	**0.9513**	**0.9513**	**0.0000**	**0.8952**	**0.8952**	**0.0000**	**8,828.3275**	**8,828.3275**	**2.5468**		**8,891.9984**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0761	0.0459	0.5444	1.6100e-003	0.2054	9.6000e-004	0.2063	0.0545	8.8000e-004	0.0554		163.1576	163.1576	4.9600e-003	4.7500e-003	164.6973
Total	**0.0761**	**0.0459**	**0.5444**	**1.6100e-003**	**0.2054**	**9.6000e-004**	**0.2063**	**0.0545**	**8.8000e-004**	**0.0554**		**163.1576**	**163.1576**	**4.9600e-003**	**4.7500e-003**	**164.6973**

3.2 Transmission - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	3.0361	23.9994	26.0221	0.0915		0.8530	0.8530		0.8016	0.8016		8,828.1653	8,828.1653	2.5448		8,891.7841
Total	**3.0361**	**23.9994**	**26.0221**	**0.0915**	**0.0000**	**0.8530**	**0.8530**	**0.0000**	**0.8016**	**0.8016**		**8,828.1653**	**8,828.1653**	**2.5448**		**8,891.7841**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0708	0.0410	0.5050	1.5600e-003	0.2054	9.1000e-004	0.2063	0.0545	8.4000e-004	0.0553		157.6086	157.6086	4.4900e-003	4.4200e-003	159.0392
Total	**0.0708**	**0.0410**	**0.5050**	**1.5600e-003**	**0.2054**	**9.1000e-004**	**0.2063**	**0.0545**	**8.4000e-004**	**0.0553**		**157.6086**	**157.6086**	**4.4900e-003**	**4.4200e-003**	**159.0392**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	3.0361	23.9994	26.0221	0.0915		0.8530	0.8530		0.8016	0.8016	0.0000	8,828.1653	8,828.1653	2.5448		8,891.7841
Total	**3.0361**	**23.9994**	**26.0221**	**0.0915**	**0.0000**	**0.8530**	**0.8530**	**0.0000**	**0.8016**	**0.8016**	**0.0000**	**8,828.1653**	**8,828.1653**	**2.5448**		**8,891.7841**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0708	0.0410	0.5050	1.5600e-003	0.2054	9.1000e-004	0.2063	0.0545	8.4000e-004	0.0553		157.6086	157.6086	4.4900e-003	4.4200e-003	159.0392
Total	**0.0708**	**0.0410**	**0.5050**	**1.5600e-003**	**0.2054**	**9.1000e-004**	**0.2063**	**0.0545**	**8.4000e-004**	**0.0553**		**157.6086**	**157.6086**	**4.4900e-003**	**4.4200e-003**	**159.0392**

3.3 Telecommunications - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.9921	7.3544	7.2855	0.0305		0.2442	0.2442		0.2275	0.2275		2,908.2383	2,908.2383	0.9154		2,931.1225
Total	**0.9921**	**7.3544**	**7.2855**	**0.0305**	**0.0000**	**0.2442**	**0.2442**	**0.0000**	**0.2275**	**0.2275**		**2,908.2383**	**2,908.2383**	**0.9154**		**2,931.1225**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0304	0.0184	0.2178	6.5000e-004	0.0822	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		65.2630	65.2630	1.9800e-003	1.9000e-003	65.8789
Total	**0.0304**	**0.0184**	**0.2178**	**6.5000e-004**	**0.0822**	**3.8000e-004**	**0.0825**	**0.0218**	**3.5000e-004**	**0.0221**		**65.2630**	**65.2630**	**1.9800e-003**	**1.9000e-003**	**65.8789**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.9921	7.3544	7.2855	0.0305		0.2442	0.2442		0.2275	0.2275	0.0000	2,908.2383	2,908.2383	0.9154		2,931.1225
Total	**0.9921**	**7.3544**	**7.2855**	**0.0305**	**0.0000**	**0.2442**	**0.2442**	**0.0000**	**0.2275**	**0.2275**	**0.0000**	**2,908.2383**	**2,908.2383**	**0.9154**		**2,931.1225**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0304	0.0184	0.2178	6.5000e-004	0.0822	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		65.2630	65.2630	1.9800e-003	1.9000e-003	65.8789
Total	**0.0304**	**0.0184**	**0.2178**	**6.5000e-004**	**0.0822**	**3.8000e-004**	**0.0825**	**0.0218**	**3.5000e-004**	**0.0221**		**65.2630**	**65.2630**	**1.9800e-003**	**1.9000e-003**	**65.8789**

3.3 Telecommunications - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.9603	6.5549	7.2210	0.0305		0.2170	0.2170		0.2025	0.2025		2,908.4552	2,908.4552	0.9152		2,931.3363
Total	**0.9603**	**6.5549**	**7.2210**	**0.0305**	**0.0000**	**0.2170**	**0.2170**	**0.0000**	**0.2025**	**0.2025**		**2,908.4552**	**2,908.4552**	**0.9152**		**2,931.3363**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0283	0.0164	0.2020	6.2000e-004	0.0822	3.6000e-004	0.0825	0.0218	3.4000e-004	0.0221		63.0435	63.0435	1.7900e-003	1.7700e-003	63.6157
Total	**0.0283**	**0.0164**	**0.2020**	**6.2000e-004**	**0.0822**	**3.6000e-004**	**0.0825**	**0.0218**	**3.4000e-004**	**0.0221**		**63.0435**	**63.0435**	**1.7900e-003**	**1.7700e-003**	**63.6157**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.9603	6.5549	7.2210	0.0305		0.2170	0.2170		0.2025	0.2025	0.0000	2,908.4552	2,908.4552	0.9152		2,931.3363
Total	**0.9603**	**6.5549**	**7.2210**	**0.0305**	**0.0000**	**0.2170**	**0.2170**	**0.0000**	**0.2025**	**0.2025**	**0.0000**	**2,908.4552**	**2,908.4552**	**0.9152**		**2,931.3363**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0283	0.0164	0.2020	6.2000e-004	0.0822	3.6000e-004	0.0825	0.0218	3.4000e-004	0.0221		63.0435	63.0435	1.7900e-003	1.7700e-003	63.6157
Total	**0.0283**	**0.0164**	**0.2020**	**6.2000e-004**	**0.0822**	**3.6000e-004**	**0.0825**	**0.0218**	**3.4000e-004**	**0.0221**		**63.0435**	**63.0435**	**1.7900e-003**	**1.7700e-003**	**63.6157**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0142	0.0223	0.1278	2.8000e-004	0.0308	2.6000e-004	0.0311	8.2200e-003	2.4000e-004	8.4700e-003		28.7148	28.7148	1.6900e-003	1.5800e-003	29.2289
Unmitigated	0.0142	0.0223	0.1278	2.8000e-004	0.0308	2.6000e-004	0.0311	8.2200e-003	2.4000e-004	8.4700e-003		28.7148	28.7148	1.6900e-003	1.5800e-003	29.2289

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	4.96	1.99	5.00	13,259	13,259
Total	4.96	1.99	5.00	13,259	13,259

4.3 Trip Type Information

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.535455	0.056260	0.172409	0.133149	0.028776	0.007661	0.007273	0.023440	0.000521	0.000192	0.028266	0.001153	0.005445

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	4.9000e-004	4.4700e-003	3.7500e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.3602	5.3602	1.0000e-004	1.0000e-004	5.3921
NaturalGas Unmitigated	4.9000e-004	4.4700e-003	3.7500e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.3602	5.3602	1.0000e-004	1.0000e-004	5.3921

5.2 Energy by Land Use - NaturalGas

Unmitigated

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	45.5616	4.9000e-004	4.4700e-003	3.7500e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.3602	5.3602	1.0000e-004	1.0000e-004	5.3921
Total		**4.9000e-004**	**4.4700e-003**	**3.7500e-003**	**3.0000e-005**		**3.4000e-004**	**3.4000e-004**		**3.4000e-004**	**3.4000e-004**		**5.3602**	**5.3602**	**1.0000e-004**	**1.0000e-004**	**5.3921**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0.0455616	4.9000e-004	4.4700e-003	3.7500e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.3602	5.3602	1.0000e-004	1.0000e-004	5.3921
Total		**4.9000e-004**	**4.4700e-003**	**3.7500e-003**	**3.0000e-005**		**3.4000e-004**	**3.4000e-004**		**3.4000e-004**	**3.4000e-004**		**5.3602**	**5.3602**	**1.0000e-004**	**1.0000e-004**	**5.3921**

6.0 Area Detail

6.1 Mitigation Measures Area

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0278	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	0.0278	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	6.3500e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0214					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	**0.0278**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

SubCategory	lb/day										lb/day					
Architectural Coating	6.3500e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0214					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	**0.0278**	**0.0000**	**1.0000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.2000e-004**	**2.2000e-004**	**0.0000**		**2.3000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

MMM SCE Transmission & Telecommunication Projects (2024 Construction) - Mojave Desert Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Equipment Type	Number

11.0 Vegetation

SCE Projects

Total On-Road Emissions

250 Max construction days per year

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Idling per Day (minutes)
Transmission - 2024	2024				Total:
Total Haul Trips	1000				
Hauling	4	250	8	20	15
Vendor	0	250	8	7.3	15
Worker	50	250	8	10.8	0
	0				
Telecommunications - 2024	2024				Total:
Total Haul Trips	1000				
Hauling	4	250	8	20	15
Vendor	0	250	8	7.3	15
Worker	20	250	8	10.8	0
	0				
Transmission - 2025	2025				Total:
Total Haul Trips	200				
Hauling	4	50	8	20	15
Vendor	0	50	8	7.3	15
Worker	50	50	8	10.8	0
	0				
Telecommunications - 2025	2025				Total:
Total Haul Trips	200				
Hauling	4	50	8	20	15
Vendor	0	50	8	7.3	15
Worker	20	50	8	10.8	0

SCE Projects

Tota **Total On-Road Emissions**

Construction Phase	Regional Emissions (Tons/year)										(MT/yr)
	ROG	NOX	CO	SO2	PM10 Dust	PM10 Exh	Total PM10	PM2.5 Dust	PM2.5 Exh	Total PM2.5	Total CO2e
Transmission - 2024	0.00	0.07	0.19	0.00	0.04	0.00	0.04	0.01	0.00	0.01	78.34
Total Haul Trips											
Hauling	0.00	0.06	0.03	0.00	0.01	0.00	0.01	0.00	0.00	0.00	36.81
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.01	0.16	0.00	0.03	0.00	0.03	0.00	0.00	0.00	41.53
Telecommunications - 2024	0.00	0.06	0.09	0.00	0.02	0.00	0.02	0.00	0.00	0.00	53.42
Total Haul Trips											
Hauling	0.00	0.06	0.03	0.00	0.01	0.00	0.01	0.00	0.00	0.00	36.81
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.06	0.00	0.01	0.00	0.01	0.00	0.00	0.00	16.61
Transmission - 2025	0.00	0.01	0.04	0.00	0.01	0.00	0.01	0.00	0.00	0.00	15.32
Total Haul Trips											
Hauling	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.21
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.03	0.00	0.01	0.00	0.01	0.00	0.00	0.00	8.10
Telecommunications - 2025	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.45
Total Haul Trips											
Hauling	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.21
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.24

SCE Projects Construction Health Risk Assessment

Health Risk Assessment Exposure Duration Assumptions for Offroad Equipment and Haul Activities (Residential Receptors)

OFFROAD

					Start Date	*1/1/2024*	*4/1/2024*	*4/2/2026*	*3/30/2040*
					End Date	*3/31/2024*	*4/1/2026*	*3/29/2040*	
					Days	*90*	*730*	*5110*	*5110*
Phase		Start Date	End Date	Hrs/Day	Duration (days)	3rd Tri	0<2	2<16	16<30
Projects									
Transmission	2024	1/1/2024	12/31/2024	8	366	91	275	0	0
Transmission	2025	1/1/2025	2/24/2025	8	55	0	55	0	0
Telecommunications	2024	1/1/2024	12/31/2024	9	366	91	275	0	0
Telecommunications	2025	1/1/2025	2/24/2025	8	55	0	55	0	0

Risk Factors

	Abbreviation	UOM	3rd Trimester	0<2	2<16	16<30
Daily Breathing Rate (95th %'ile)	DBR	L/kg-day	361	1090	572	261
Fraction Of Time At Home [a]	FAH	unitless	1	1	1	0.73
Exposure Frequency	EF	days/year	0.96	0.96	0.96	0.96
Age Sensitivity Factor	ASF	unitless	10	10	3	1
Inhalation Absorption Factor	A	unitless	1	1	1	1
Conversion Factor	CF_1	m^3/L	0.001	0.001	0.001	0.001
Conversion Factor	CF_2	$\mu g/m^3$	0.001	0.001	0.001	0.001
Cancer Potency Factor (diesel exhaust)	CPF	$mg/kg\text{-}day^{-1}$	1.1	1.1	1.1	1.1
Averaging Time (for residential exposure)	AT	years	70.00	70.00	70.00	70.00

[a] assume school or daycare will have cancer risk of >1 per million

Intake Factor for Inhalation, IF (m^3/kg-day)

Phase	Year	Equation	3rd Trimester	0<2	2<16	16<30
Projects		$\frac{DBR \cdot FAH \cdot EF \cdot ED \cdot ASF \cdot A \cdot CF_1}{AT}$	0	0	0	0
Transmission	2024		0.012329142	0.112497654	0	0
Transmission	2025		0	0.022499531	0	0
Telecommunications	2024		0.012329142	0.112497654	0	0
Telecommunications	2025		0	0.022499531	0	0

Risk Calculation Part 1, R1

Equation	3rd Trimester	0<2	2<16	16<30
$IF \cdot CPF \cdot CF_2$	0	0	0	0
	1.35621E-05	0.000123747	0	0
	0	2.47495E-05	0	0
	1.35621E-05	0.000123747	0	0
	0	2.47495E-05	0	0

SCE Projects Construction Health Risk Assessment

Offroad DPM Emissions, Ground Level Concentrations and Health Risk Calculations

Residential Receptors

Phase		Start Date	End Date	Work Days	Emissions (lbs/day)	Emissions (g/s)
Projects						
Transmission	2024	1/1/2024	12/31/2024	262	0.96	0.005
Transmission	2025	1/1/2025	2/24/2025	39	0.86	0.005
Telecommunications	2024	1/1/2024	12/31/2024	262	0.25	0.001
Telecommunications	2025	1/1/2025	2/24/2025	39	0.22	0.001

Res MAX:	4.47
Res Max (Mill receptors):	0.16
Res Max (SCE receptors):	4.47

AERMOD Column Identifier:			4	4	4	5	5						
			Projects	Transmission	Transmission	Telecommunications	Telecommunications	Child Risk					
Unique Identifier	X (UTM)	Y (UTM)	P1	P1	P1	P1	P1	3rd Trimester	0<2	2<16	16<30	Total	per million
394728.85193866844.031	394728.9	3866844.031	0	0.000476332	0.000476332	0.000240193	0.000240193	9.71755E-09	1.06402E-07	0	0	1.161E-07	0.1161192
394743.85193866844.031	394743.9	3866844.031	0	0.00047948	0.00047948	0.000239073	0.000239073	9.74506E-09	1.06703E-07	0	0	1.164E-07	0.116448
394758.85193866844.031	394758.9	3866844.031	0	0.00048301	0.00048301	0.00023783	0.00023783	9.77607E-09	1.07042E-07	0	0	1.168E-07	0.1168185
394773.85193866844.031	394773.9	3866844.031	0	0.000486921	0.000486921	0.000236487	0.000236487	9.8109E-09	1.07424E-07	0	0	1.172E-07	0.1172347
394788.85193866844.031	394788.9	3866844.031	0	0.000490642	0.000490642	0.000235144	0.000235144	9.84314E-09	1.07777E-07	0	0	1.176E-07	0.11762
394803.85193866844.031	394803.9	3866844.031	0	0.000494458	0.000494458	0.000233801	0.000233801	9.87668E-09	1.08144E-07	0	0	1.18E-07	0.1180208
394818.85193866844.031	394818.9	3866844.031	0	0.00049856	0.00049856	0.000232358	0.000232358	9.91275E-09	1.08539E-07	0	0	1.185E-07	0.1184518
394833.85193866844.031	394833.9	3866844.031	0	0.000503044	0.000503044	0.000230791	0.000230791	9.95231E-09	1.08972E-07	0	0	1.189E-07	0.1189245
394848.85193866844.031	394848.9	3866844.031	0	0.000507051	0.000507051	0.000229323	0.000229323	9.98675E-09	1.09349E-07	0	0	1.193E-07	0.119336
394728.85193866859.031	394728.9	3866859.031	0	0.000474519	0.000474519	0.000242481	0.000242481	9.724E-09	1.06472E-07	0	0	1.162E-07	0.1161963
394743.85193866859.031	394743.9	3866859.031	0	0.000477286	0.000477286	0.000241411	0.000241411	9.74701E-09	1.06724E-07	0	0	1.165E-07	0.1164713
394758.85193866859.031	394758.9	3866859.031	0	0.000480243	0.000480243	0.000240267	0.000240267	9.7716E-09	1.06994E-07	0	0	1.168E-07	0.1167652
394773.85193866859.031	394773.9	3866859.031	0	0.000483487	0.000483487	0.000238999	0.000238999	9.79839E-09	1.07287E-07	0	0	1.171E-07	0.1170853
394788.85193866859.031	394788.9	3866859.031	0	0.000487017	0.000487017	0.000237705	0.000237705	9.82872E-09	1.07619E-07	0	0	1.174E-07	0.1174477
394803.85193866859.031	394803.9	3866859.031	0	0.000490737	0.000490737	0.000236313	0.000236313	9.86029E-09	1.07965E-07	0	0	1.178E-07	0.1178249
394818.85193866859.031	394818.9	3866859.031	0	0.00049503	0.00049503	0.000234771	0.000234771	9.8976E-09	1.08373E-07	0	0	1.183E-07	0.1182707
394833.85193866859.031	394833.9	3866859.031	0	0.000499896	0.000499896	0.000233079	0.000233079	9.94065E-09	1.08844E-07	0	0	1.188E-07	0.1187851
394848.85193866859.031	394848.9	3866859.031	0	0.000504093	0.000504093	0.000231512	0.000231512	9.97632E-09	1.09235E-07	0	0	1.192E-07	0.1192115
394728.85193866874.031	394728.9	3866874.031	0	0.000472611	0.000472611	0.000244794	0.000244794	9.72949E-09	1.06532E-07	0	0	1.163E-07	0.116262
394743.85193866874.031	394743.9	3866874.031	0	0.000475378	0.000475378	0.000243675	0.000243675	9.75183E-09	1.06777E-07	0	0	1.165E-07	0.1165289
394758.85193866874.031	394758.9	3866874.031	0	0.00047824	0.00047824	0.000242531	0.000242531	9.77513E-09	1.07032E-07	0	0	1.168E-07	0.1168073
394773.85193866874.031	394773.9	3866874.031	0	0.000481388	0.000481388	0.000241262	0.000241262	9.80062E-09	1.07311E-07	0	0	1.171E-07	0.1171119
394788.85193866874.031	394788.9	3866874.031	0	0.000484632	0.000484632	0.000239969	0.000239969	9.82707E-09	1.07601E-07	0	0	1.174E-07	0.117428
394803.85193866874.031	394803.9	3866874.031	0	0.000487971	0.000487971	0.000238626	0.000238626	9.85414E-09	1.07897E-07	0	0	1.178E-07	0.1177515
394818.85193866874.031	394818.9	3866874.031	0	0.000491691	0.000491691	0.000237158	0.000237158	9.8847E-09	1.08232E-07	0	0	1.181E-07	0.1181166
394833.85193866874.031	394833.9	3866874.031	0	0.000496461	0.000496461	0.000235442	0.000235442	9.92611E-09	1.08685E-07	0	0	1.186E-07	0.1186115
394848.85193866874.031	394848.9	3866874.031	0	0.00050085	0.00050085	0.000233801	0.000233801	9.96337E-09	1.09093E-07	0	0	1.191E-07	0.1190566
394728.85193866889.031	394728.9	3866889.031	0	0.000470417	0.000470417	0.000247207	0.000247207	9.73245E-09	1.06565E-07	0	0	1.163E-07	0.1162974
394743.85193866889.031	394743.9	3866889.031	0	0.000473661	0.000473661	0.000245963	0.000245963	9.75958E-09	1.06862E-07	0	0	1.166E-07	0.1166215
394758.85193866889.031	394758.9	3866889.031	0	0.000476809	0.000476809	0.000244695	0.000244695	9.78507E-09	1.07141E-07	0	0	1.169E-07	0.1169261
394773.85193866889.031	394773.9	3866889.031	0	0.000479862	0.000479862	0.000243426	0.000243426	9.80927E-09	1.07406E-07	0	0	1.172E-07	0.1172153
394788.85193866889.031	394788.9	3866889.031	0	0.00048301	0.00048301	0.000242108	0.000242108	9.83409E-09	1.07678E-07	0	0	1.175E-07	0.1175118
394803.85193866889.031	394803.9	3866889.031	0	0.000486253	0.000486253	0.000240765	0.000240765	9.85986E-09	1.0796E-07	0	0	1.178E-07	0.1178198
394818.85193866889.031	394818.9	3866889.031	0	0.000489306	0.000489306	0.000239397	0.000239397	9.88271E-09	1.0821E-07	0	0	1.181E-07	0.1180929
394833.85193866889.031	394833.9	3866889.031	0	0.000493408	0.000493408	0.00023778	0.00023778	9.91642E-09	1.08579E-07	0	0	1.185E-07	0.1184956
394848.85193866889.031	394848.9	3866889.031	0	0.000497797	0.000497797	0.000236064	0.000236064	9.95266E-09	1.08976E-07	0	0	1.189E-07	0.1189287
394728.85193866904.031	394728.9	3866904.031	0	0.000467364	0.000467364	0.000249893	0.000249893	9.72748E-09	1.0651E-07	0	0	1.162E-07	0.116238
394743.85193866904.031	394743.9	3866904.031	0	0.000470989	0.000470989	0.0002485	0.0002485	9.75776E-09	1.06842E-07	0	0	1.166E-07	0.1165997
394758.85193866904.031	394758.9	3866904.031	0	0.000474328	0.000474328	0.000247132	0.000247132	9.78449E-09	1.07135E-07	0	0	1.169E-07	0.1169191
394773.85193866904.031	394773.9	3866904.031	0	0.000477667	0.000477667	0.000245764	0.000245764	9.81122E-09	1.07427E-07	0	0	1.172E-07	0.1172386
394788.85193866904.031	394788.9	3866904.031	0	0.000481006	0.000481006	0.000244346	0.000244346	9.83728E-09	1.07713E-07	0	0	1.175E-07	0.1175499
394803.85193866904.031	394803.9	3866904.031	0	0.000484441	0.000484441	0.000242904	0.000242904	9.86429E-09	1.08008E-07	0	0	1.179E-07	0.1178727
394818.85193866904.031	394818.9	3866904.031	0	0.000487589	0.000487589	0.000241511	0.000241511	9.88809E-09	1.08269E-07	0	0	1.182E-07	0.1181572
394833.85193866904.031	394833.9	3866904.031	0	0.000491023	0.000491023	0.000239994	0.000239994	9.9141E-09	1.08554E-07	0	0	1.185E-07	0.1184679
394848.85193866904.031	394848.9	3866904.031	0	0.000495221	0.000495221	0.000238302	0.000238302	9.94809E-09	1.08926E-07	0	0	1.189E-07	0.118874
394728.85193866919.031	394728.9	3866919.031	0	0.000465361	0.000465361	0.00025238	0.00025238	9.73404E-09	1.06582E-07	0	0	1.163E-07	0.1163164
394743.85193866919.031	394743.9	3866919.031	0	0.000468795	0.000468795	0.000250962	0.000250962	9.76139E-09	1.06882E-07	0	0	1.166E-07	0.1166432
394758.85193866919.031	394758.9	3866919.031	0	0.000471753	0.000471753	0.000249694	0.000249694	9.7843E-09	1.07133E-07	0	0	1.169E-07	0.1169169
394773.85193866919.031	394773.9	3866919.031	0	0.000474901	0.000474901	0.000248326	0.000248326	9.80844E-09	1.07397E-07	0	0	1.172E-07	0.1172054
394788.85193866919.031	394788.9	3866919.031	0	0.000478335	0.000478335	0.000246859	0.000246859	9.83512E-09	1.07689E-07	0	0	1.175E-07	0.1175241
394803.85193866919.031	394803.9	3866919.031	0	0.00048177	0.00048177	0.000245366	0.000245366	9.86146E-09	1.07977E-07	0	0	1.178E-07	0.1178389
394818.85193866919.031	394818.9	3866919.031	0	0.000485204	0.000485204	0.000243824	0.000243824	9.88712E-09	1.08258E-07	0	0	1.181E-07	0.1181455
394833.85193866919.031	394833.9	3866919.031	0	0.00048902	0.00048902	0.000242183	0.000242183	9.91661E-09	1.08581E-07	0	0	1.185E-07	0.1184979
394848.85193866919.031	394848.9	3866919.031	0	0.000492836	0.000492836	0.000240541	0.000240541	9.9461E-09	1.08904E-07	0	0	1.189E-07	0.1188503
394728.85193866934.031	394728.9	3866934.031	0	0.00046288	0.00046288	0.000255042	0.000255042	9.7365E-09	1.06609E-07	0	0	1.163E-07	0.1163457
394743.85193866934.031	394743.9	3866934.031	0	0.000466124	0.000466124	0.000253698	0.000253698	9.76227E-09	1.06891E-07	0	0	1.167E-07	0.1166537
394758.85193866934.031	394758.9	3866934.031	0	0.000469272	0.000469272	0.000252281	0.000252281	9.78574E-09	1.07148E-07	0	0	1.169E-07	0.1169341
394773.85193866934.031	394773.9	3866934.031	0	0.000472611	0.000472611	0.000250838	0.000250838	9.81146E-09	1.0743E-07	0	0	1.172E-07	0.1172414
394788.85193866934.031	394788.9	3866934.031	0	0.00047595	0.00047595	0.000249346	0.000249346	9.83651E-09	1.07704E-07	0	0	1.175E-07	0.1175407
394803.85193866934.031	394803.9	3866934.031	0	0.000479194	0.000479194	0.000247878	0.000247878	9.86059E-09	1.07968E-07	0	0	1.178E-07	0.1178285
394818.85193866934.031	394818.9	3866934.031	0	0.000482533	0.000482533	0.000246336	0.000246336	9.88496E-09	1.08235E-07	0	0	1.181E-07	0.1181198
394833.85193866934.031	394833.9	3866934.031	0	0.00048654	0.00048654	0.000244595	0.000244595	9.91569E-09	1.08571E-07	0	0	1.185E-07	0.1184869
394848.85193866934.031	394848.9	3866934.031	0	0.000490165	0.000490165	0.000242929	0.000242929	9.94226E-09	1.08862E-07	0	0	1.188E-07	0.1188044
394728.85193866949.031	394728.9	3866949.031	0	0.0004604	0.0004604	0.000257802	0.000257802	9.7403E-09	1.06651E-07	0	0	1.164E-07	0.1163911
394743.85193866949.031	394743.9	3866949.031	0	0.000463644	0.000463644	0.00025641	0.00025641	9.7654E-09	1.06926E-07	0	0	1.167E-07	0.1166911
394758.85193866949.031	394758.9	3866949.031	0	0.000466887	0.000466887	0.000254967	0.000254967	9.78983E-09	1.07193E-07	0	0	1.17E-07	0.1169829
394773.85193866949.031	394773.9	3866949.031	0	0.000470322	0.000470322	0.00025345	0.00025345	9.81583E-09	1.07478E-07	0	0	1.173E-07	0.1172936
394788.85193866949.031	394788.9	3866949.031	0	0.000473565	0.000473565	0.000251933	0.000251933	9.83924E-09	1.07734E-07	0	0	1.176E-07	0.1175734
394803.85193866949.031	394803.9	3866949.031	0	0.000476904	0.000476904	0.000250415	0.000250415	9.86395E-09	1.08005E-07	0	0	1.179E-07	0.1178686
394818.85193866949.031	394818.9	3866949.031	0	0.000480434	0.000480434	0.000248774	0.000248774	9.88956E-09	1.08285E-07	0	0	1.182E-07	0.1181746
394833.85193866949.031	394833.9	3866949.031	0	0.00048425	0.00048425	0.000247033	0.000247033	9.9177E-09	1.08593E-07	0	0	1.185E-07	0.1185109
394848.85193866949.031	394848.9	3866949.031	0	0.000487684	0.000487684	0.000245366	0.000245366	9.94167E-09	1.08856E-07	0	0	1.188E-07	0.1187974
394728.85193866964.031	394728.9	3866964.031	0	0.000458587	0.000458587	0.000260513	0.000260513	9.75249E-09	1.06784E-07	0	0	1.165E-07	0.1165367
394743.85193866964.031	394743.9	3866964.031	0	0.000461736	0.000461736	0.000259096	0.000259096	9.77596E-09	1.07041E-07	0	0	1.168E-07	0.1168172
394758.85193866964.031	394758.9	3866964.031	0	0.000464693	0.000464693	0.000257678	0.000257678	9.79684E-09	1.0727E-07	0	0	1.171E-07	0.1170667
394773.85193866964.031	394773.9	3866964.031	0	0.000467937	0.000467937	0.000256186	0.000256186	9.82059E-09	1.0753E-07	0	0	1.174E-07	0.1173505
394788.85193866964.031	394788.9	3866964.031	0	0.000471466	0.000471466	0.000254569	0.000254569	9.84653E-09	1.07814E-07	0	0	1.177E-07	0.1176605
394803.85193866964.031	394803.9	3866964.031	0	0.000474805	0.000474805	0.000252977	0.000252977	9.87023E-09	1.08073E-07	0	0	1.179E-07	0.1179437
394818.85193866964.031	394818.9	3866964.031	0	0.000478431	0.000478431	0.000251286	0.000251286	9.89646E-09	1.08361E-07	0	0	1.183E-07	0.1182571
394833.85193866964.031	394833.9	3866964.031	0	0.000482056	0.000482056	0.00024957	0.00024957	9.92235E-09	1.08644E-07	0	0	1.186E-07	0.1185665

			Projects	Transmission	Transmission	Telecommunications	Telecommunications	Child Risk					
Unique Identifier	X (UTM)	Y (UTM)	P1	P1	P1	P1	P1	3rd Trimester	0<2	2<16	16<30	Total	per million
394848.85193866964.031	394848.9	3866964.031	0	0.000485586	0.000485586	0.000247878	0.000247878	9.94728E-09	1.08917E-07	0	0	1.189E-07	0.1188644
394728.85193866979.031	394728.9	3866979.031	0	0.000456679	0.000456679	0.000263349	0.000263349	9.76507E-09	1.06922E-07	0	0	1.167E-07	0.116687
394743.85193866979.031	394743.9	3866979.031	0	0.000459637	0.000459637	0.000261931	0.000261931	9.78595E-09	1.07151E-07	0	0	1.169E-07	0.1169366
394758.85193866979.031	394758.9	3866979.031	0	0.000462594	0.000462594	0.000260513	0.000260513	9.80683E-09	1.07379E-07	0	0	1.172E-07	0.1171861
394773.85193866979.031	394773.9	3866979.031	0	0.000465742	0.000465742	0.000258971	0.000258971	9.82861E-09	1.07618E-07	0	0	1.174E-07	0.1174464
394788.85193866979.031	394788.9	3866979.031	0	0.000469558	0.000469558	0.000257255	0.000257255	9.85709E-09	1.0793E-07	0	0	1.178E-07	0.1177867
394803.85193866979.031	394803.9	3866979.031	0	0.000472993	0.000472993	0.000255614	0.000255614	9.8814E-09	1.08196E-07	0	0	1.181E-07	0.1180772
394818.85193866979.031	394818.9	3866979.031	0	0.000476523	0.000476523	0.000253897	0.000253897	9.906E-09	1.08465E-07	0	0	1.184E-07	0.1183711
394833.85193866979.031	394833.9	3866979.031	0	0.000479862	0.000479862	0.000252206	0.000252206	9.92834E-09	1.0871E-07	0	0	1.186E-07	0.1186381
394848.85193866979.031	394848.9	3866979.031	0	0.000483678	0.000483678	0.00025039	0.00025039	9.95547E-09	1.09007E-07	0	0	1.19E-07	0.1189623
394728.85193866994.031	394728.9	3866994.031	0	0.000454771	0.000454771	0.000266284	0.000266284	9.77899E-09	1.07074E-07	0	0	1.169E-07	0.1168535
394743.85193866994.031	394743.9	3866994.031	0	0.000457824	0.000457824	0.000264816	0.000264816	9.80049E-09	1.0731E-07	0	0	1.171E-07	0.1171104
394758.85193866994.031	394758.9	3866994.031	0	0.000460686	0.000460686	0.000263399	0.000263399	9.82008E-09	1.07524E-07	0	0	1.173E-07	0.1173444
394773.85193866994.031	394773.9	3866994.031	0	0.000463834	0.000463834	0.000261832	0.000261832	9.84153E-09	1.07759E-07	0	0	1.176E-07	0.1176007
394788.85193866994.031	394788.9	3866994.031	0	0.000467746	0.000467746	0.000260041	0.000260041	9.87028E-09	1.08074E-07	0	0	1.179E-07	0.1179444
394803.85193866994.031	394803.9	3866994.031	0	0.000471276	0.000471276	0.000258325	0.000258325	9.89488E-09	1.08343E-07	0	0	1.182E-07	0.1182383
394818.85193866994.031	394818.9	3866994.031	0	0.000474805	0.000474805	0.000256584	0.000256584	9.91914E-09	1.08609E-07	0	0	1.185E-07	0.1185281
394833.85193866994.031	394833.9	3866994.031	0	0.000478335	0.000478335	0.000254818	0.000254818	9.94306E-09	1.08871E-07	0	0	1.188E-07	0.118814
394848.85193866994.031	394848.9	3866994.031	0	0.000482056	0.000482056	0.000252952	0.000252952	9.96822E-09	1.09146E-07	0	0	1.191E-07	0.1191146
394728.85193867009.031	394728.9	3867009.031	0	0.000453245	0.000453245	0.000269219	0.000269219	9.7981E-09	1.07284E-07	0	0	1.171E-07	0.1170817
394743.85193867009.031	394743.9	3867009.031	0	0.000456393	0.000456393	0.000267726	0.000267726	9.82055E-09	1.0753E-07	0	0	1.174E-07	0.1173501
394758.85193867009.031	394758.9	3867009.031	0	0.000459446	0.000459446	0.000266209	0.000266209	9.84138E-09	1.07758E-07	0	0	1.176E-07	0.1175989
394773.85193867009.031	394773.9	3867009.031	0	0.00046269	0.00046269	0.000264593	0.000264593	9.86344E-09	1.07999E-07	0	0	1.179E-07	0.1178626
394788.85193867009.031	394788.9	3867009.031	0	0.000466124	0.000466124	0.000262876	0.000262876	9.88674E-09	1.08254E-07	0	0	1.181E-07	0.118141
394803.85193867009.031	394803.9	3867009.031	0	0.000469845	0.000469845	0.000261086	0.000261086	9.91292E-09	1.08541E-07	0	0	1.185E-07	0.1184538
394818.85193867009.031	394818.9	3867009.031	0	0.000473565	0.000473565	0.000259245	0.000259245	9.93841E-09	1.0882E-07	0	0	1.188E-07	0.1187585
394833.85193867009.031	394833.9	3867009.031	0	0.00047719	0.00047719	0.000257404	0.000257404	9.96262E-09	1.09085E-07	0	0	1.19E-07	0.1190477
394848.85193867009.031	394848.9	3867009.031	0	0.00048072	0.00048072	0.000255589	0.000255589	9.98586E-09	1.0934E-07	0	0	1.193E-07	0.1193255
394728.85193867024.031	394728.9	3867024.031	0	0.0004521	0.0004521	0.000272204	0.000272204	9.82305E-09	1.07557E-07	0	0	1.174E-07	0.1173799
394743.85193867024.031	394743.9	3867024.031	0	0.000455344	0.000455344	0.000270612	0.000270612	9.84545E-09	1.07802E-07	0	0	1.176E-07	0.1176476
394758.85193867024.031	394758.9	3867024.031	0	0.000458587	0.000458587	0.00026902	0.00026902	9.86785E-09	1.08047E-07	0	0	1.179E-07	0.1179153
394773.85193867024.031	394773.9	3867024.031	0	0.000461926	0.000461926	0.000267353	0.000267353	9.89053E-09	1.08296E-07	0	0	1.182E-07	0.1181863
394788.85193867024.031	394788.9	3867024.031	0	0.000465265	0.000465265	0.000265637	0.000265637	9.91254E-09	1.08537E-07	0	0	1.184E-07	0.1184493
394803.85193867024.031	394803.9	3867024.031	0	0.0004687	0.0004687	0.000263871	0.000263871	9.93517E-09	1.08785E-07	0	0	1.187E-07	0.1187197
394818.85193867024.031	394818.9	3867024.031	0	0.000472516	0.000472516	0.000261956	0.000261956	9.96095E-09	1.09067E-07	0	0	1.19E-07	0.1190277
394833.85193867024.031	394833.9	3867024.031	0	0.000476427	0.000476427	0.000260016	0.000260016	9.98768E-09	1.0936E-07	0	0	1.193E-07	0.1193472
394848.85193867024.031	394848.9	3867024.031	0	0.000480148	0.000480148	0.000258101	0.000258101	1.00122E-08	1.09628E-07	0	0	1.196E-07	0.1196398
394863.85193867024.031	394863.9	3867024.031	0	0.000484059	0.000484059	0.000256111	0.000256111	1.00382E-08	1.09913E-07	0	0	1.2E-07	0.1199512
394878.85193867024.031	394878.9	3867024.031	0	0.000487971	0.000487971	0.000254146	0.000254146	1.00646E-08	1.10202E-07	0	0	1.203E-07	0.1202667
394893.85193867024.031	394893.9	3867024.031	0	0.000491882	0.000491882	0.000252156	0.000252156	1.00907E-08	1.10487E-07	0	0	1.206E-07	0.1205781
394908.85193867024.031	394908.9	3867024.031	0	0.000495889	0.000495889	0.000250142	0.000250142	1.01177E-08	1.10783E-07	0	0	1.209E-07	0.1209009
394923.85193867024.031	394923.9	3867024.031	0	0.000500373	0.000500373	0.000248028	0.000248028	1.01498E-08	1.11135E-07	0	0	1.213E-07	0.1212849
394938.85193867024.031	394938.9	3867024.031	0	0.00050457	0.00050457	0.000246013	0.000246013	1.01794E-08	1.11459E-07	0	0	1.216E-07	0.1216387
394953.85193867024.031	394953.9	3867024.031	0	0.000508959	0.000508959	0.000243924	0.000243924	1.02106E-08	1.11801E-07	0	0	1.22E-07	0.1220113
394968.85193867024.031	394968.9	3867024.031	0	0.000513442	0.000513442	0.000241884	0.000241884	1.02438E-08	1.12164E-07	0	0	1.224E-07	0.1224074
394983.85193867024.031	394983.9	3867024.031	0	0.000517831	0.000517831	0.000239869	0.000239869	1.0276E-08	1.12516E-07	0	0	1.228E-07	0.1227921
394998.85193867024.031	394998.9	3867024.031	0	0.000522601	0.000522601	0.000237805	0.000237805	1.03127E-08	1.12918E-07	0	0	1.232E-07	0.1232306
394728.85193867039.031	394728.9	3867039.031	0	0.00045086	0.00045086	0.000275337	0.000275337	9.84873E-09	1.07838E-07	0	0	1.177E-07	0.1176868
394743.85193867039.031	394743.9	3867039.031	0	0.000454008	0.000454008	0.000273746	0.000273746	9.86984E-09	1.08069E-07	0	0	1.179E-07	0.117939
394758.85193867039.031	394758.9	3867039.031	0	0.000457156	0.000457156	0.000272129	0.000272129	9.89061E-09	1.08297E-07	0	0	1.182E-07	0.1181872
394773.85193867039.031	394773.9	3867039.031	0	0.000460495	0.000460495	0.000270413	0.000270413	9.91262E-09	1.08538E-07	0	0	1.185E-07	0.1184502
394788.85193867039.031	394788.9	3867039.031	0	0.000463548	0.000463548	0.000268746	0.000268746	9.93142E-09	1.08743E-07	0	0	1.187E-07	0.1186749
394803.85193867039.031	394803.9	3867039.031	0	0.000466887	0.000466887	0.00026698	0.00026698	9.95275E-09	1.08977E-07	0	0	1.189E-07	0.1189298
394818.85193867039.031	394818.9	3867039.031	0	0.000471371	0.000471371	0.000264841	0.000264841	9.98455E-09	1.09325E-07	0	0	1.193E-07	0.1193098
394833.85193867039.031	394833.9	3867039.031	0	0.000475378	0.000475378	0.000262802	0.000262802	1.00112E-08	1.09617E-07	0	0	1.196E-07	0.1196286
394848.85193867039.031	394848.9	3867039.031	0	0.000479194	0.000479194	0.000260812	0.000260812	1.0036E-08	1.09889E-07	0	0	1.199E-07	0.1199246
394863.85193867039.031	394863.9	3867039.031	0	0.000483201	0.000483201	0.000258748	0.000258748	1.00623E-08	1.10177E-07	0	0	1.202E-07	0.1202393
394878.85193867039.031	394878.9	3867039.031	0	0.000487017	0.000487017	0.000256758	0.000256758	1.00871E-08	1.10448E-07	0	0	1.205E-07	0.1205353
394893.85193867039.031	394893.9	3867039.031	0	0.000490928	0.000490928	0.000254743	0.000254743	1.01128E-08	1.1073E-07	0	0	1.208E-07	0.1208427
394908.85193867039.031	394908.9	3867039.031	0	0.000494935	0.000494935	0.000252728	0.000252728	1.01399E-08	1.11026E-07	0	0	1.212E-07	0.1211655
394923.85193867039.031	394923.9	3867039.031	0	0.000499419	0.000499419	0.00025054	0.00025054	1.0171E-08	1.11366E-07	0	0	1.215E-07	0.1215375
394938.85193867039.031	394938.9	3867039.031	0	0.000503712	0.000503712	0.000248475	0.000248475	1.02012E-08	1.11697E-07	0	0	1.219E-07	0.1218986
394953.85193867039.031	394953.9	3867039.031	0	0.000507814	0.000507814	0.000246461	0.000246461	1.02295E-08	1.12007E-07	0	0	1.222E-07	0.1222369
394968.85193867039.031	394968.9	3867039.031	0	0.000512393	0.000512393	0.000244346	0.000244346	1.02629E-08	1.12373E-07	0	0	1.226E-07	0.1226364
394983.85193867039.031	394983.9	3867039.031	0	0.000516972	0.000516972	0.000242257	0.000242257	1.02967E-08	1.12743E-07	0	0	1.23E-07	0.1230399
394998.85193867039.031	394998.9	3867039.031	0	0.000521838	0.000521838	0.000240143	0.000240143	1.0334E-08	1.13152E-07	0	0	1.235E-07	0.1234858
394728.85193867054.031	394728.9	3867054.031	0	0.000449715	0.000449715	0.000278546	0.000278546	9.87672E-09	1.08145E-07	0	0	1.18E-07	0.1180213
394743.85193867054.031	394743.9	3867054.031	0	0.000452863	0.000452863	0.000276929	0.000276929	9.89749E-09	1.08372E-07	0	0	1.183E-07	0.1182694
394758.85193867054.031	394758.9	3867054.031	0	0.000455916	0.000455916	0.000275313	0.000275313	9.91697E-09	1.08585E-07	0	0	1.185E-07	0.1185022
394773.85193867054.031	394773.9	3867054.031	0	0.00045916	0.00045916	0.000273571	0.000273571	9.93734E-09	1.08808E-07	0	0	1.187E-07	0.1187457
394788.85193867054.031	394788.9	3867054.031	0	0.000462117	0.000462117	0.00027188	0.00027188	9.95451E-09	1.08996E-07	0	0	1.19E-07	0.1189509
394803.85193867054.031	394803.9	3867054.031	0	0.000465552	0.000465552	0.00027004	0.00027004	9.97613E-09	1.09233E-07	0	0	1.192E-07	0.1192091
394818.85193867054.031	394818.9	3867054.031	0	0.000470417	0.000470417	0.000267726	0.000267726	1.00107E-08	1.09612E-07	0	0	1.196E-07	0.1196228
394833.85193867054.031	394833.9	3867054.031	0	0.00047471	0.00047471	0.000265563	0.000265563	1.00396E-08	1.09928E-07	0	0	1.2E-07	0.1199678
394848.85193867054.031	394848.9	3867054.031	0	0.000478526	0.000478526	0.000263523	0.000263523	1.00637E-08	1.10192E-07	0	0	1.203E-07	0.1202557
394863.85193867054.031	394863.9	3867054.031	0	0.000482533	0.000482533	0.000261459	0.000261459	1.00901E-08	1.1048E-07	0	0	1.206E-07	0.1205705
394878.85193867054.031	394878.9	3867054.031	0	0.000486349	0.000486349	0.000259394	0.000259394	1.01138E-08	1.10741E-07	0	0	1.209E-07	0.1208543
394893.85193867054.031	394893.9	3867054.031	0	0.00049026	0.00049026	0.000257355	0.000257355	1.01392E-08	1.11018E-07	0	0	1.212E-07	0.1211577
394908.85193867054.031	394908.9	3867054.031	0	0.000494362	0.000494362	0.000255265	0.000255265	1.01665E-08	1.11317E-07	0	0	1.215E-07	0.1214839
394923.85193867054.031	394923.9	3867054.031	0	0.000498655	0.000498655	0.000253102	0.000253102	1.01954E-08	1.11634E-07	0	0	1.218E-07	0.1218289
394938.85193867054.031	394938.9	3867054.031	0	0.000502758	0.000502758	0.000251062	0.000251062	1.02233E-08	1.1194E-07	0	0	1.222E-07	0.1221632
394953.85193867054.031	394953.9	3867054.031	0	0.000507051	0.000507051	0.000248948	0.000248948	1.02529E-08	1.12263E-07	0	0	1.225E-07	0.1225163
394968.85193867054.031	394968.9	3867054.031	0	0.000511725	0.000511725	0.000246759	0.000246759	1.02866E-08	1.12633E-07	0	0	1.229E-07	0.1229192
394983.85193867054.031	394983.9	3867054.031	0	0.000516209	0.000516209	0.000244695	0.000244695	1.03194E-08	1.12992E-07	0	0	1.233E-07	0.1233112
394998.85193867054.031	394998.9	3867054.031	0	0.000520979	0.000520979	0.000242531	0.000242531	1.03548E-08	1.13379E-07	0	0	1.237E-07	0.1237336
394728.85193867069.031	394728.9	3867069.031	0	0.000448475	0.000448475	0.000281879	0.000281879	9.9051E-09	1.08455E-07	0	0	1.184E-07	0.1183604
394743.85193867069.031	394743.9	3867069.031	0	0.000451623	0.000451623	0.000280237	0.000280237	9.92553E-09	1.08679E-07	0	0	1.186E-07	0.1186046
394758.85193867069.031	394758.9	3867069.031	0	0.000454676	0.000454676	0.000278571	0.000278571	9.94434E-09	1.08885E-07	0	0	1.188E-07	0.1188292
394773.85193867069.031	394773.9	3867069.031	0	0.00045792	0.00045792	0.000276805	0.000276805	9.96438E-09	1.09104E-07	0	0	1.191E-07	0.1190687
394788.85193867069.031	394788.9	3867069.031	0	0.000461354	0.000461354	0.000274939	0.000274939	9.98565E-09	1.09337E-07	0	0	1.193E-07	0.119323
394803.85193867069.031	394803.9	3867069.031	0	0.000464979	0.000464979	0.000272999	0.000272999	1.00085E-08	1.09588E-07	0	0	1.196E-07	0.1195961
394818.85193867069.031	394818.9	3867069.031	0	0.000469368	0.000469368	0.000270761	0.000270761	1.00377E-08	1.09907E-07	0	0	1.199E-07	0.1199445
394833.85193867069.031	394833.9	3867069.031	0	0.000473851	0.000473851	0.000268498	0.000268498	1.00678E-08	1.10237E-07	0	0	1.203E-07	0.1203043
394848.85193867069.031	394848.9	3867069.031	0	0.000477858	0.000477858	0.000266358	0.000266358	1.00931E-08	1.10514E-07	0	0	1.206E-07	0.120607
394863.85193867069.031	394863.9	3867069.031	0	0.000481865	0.000481865	0.000264219	0.000264219	1.01184E-08	1.10791E-07	0	0	1.209E-07	0.1209097
394878.85193867069.031	394878.9	3867069.031	0	0.000485681	0.000485681	0.000262155	0.000262155	1.01422E-08	1.11051E-07	0	0	1.212E-07	0.1211935

			Projects	Transmission	Transmission	Telecommunications	Telecommunications	Child Risk					
Unique Identifier	X (UTM)	Y (UTM)	P1	P1	P1	P1	P1	3rd Trimester	0<2	2<16	16<30	Total	per million
394893.85193867069.031	394893.9	3867069.031	0	0.000489592	0.000489592	0.000260041	0.000260041	1.01666E-08	1.11318E-07	0	0	1.215E-07	0.1214848
394908.85193867069.031	394908.9	3867069.031	0	0.000493599	0.000493599	0.000257927	0.000257927	1.01922E-08	1.11599E-07	0	0	1.218E-07	0.1217915
394923.85193867069.031	394923.9	3867069.031	0	0.000497892	0.000497892	0.000255763	0.000255763	1.02211E-08	1.11915E-07	0	0	1.221E-07	0.1221366
394938.85193867069.031	394938.9	3867069.031	0	0.00050209	0.00050209	0.000253624	0.000253624	1.0249E-08	1.12221E-07	0	0	1.225E-07	0.1224702
394953.85193867069.031	394953.9	3867069.031	0	0.000506669	0.000506669	0.00025141	0.00025141	1.02811E-08	1.12572E-07	0	0	1.229E-07	0.1228535
394968.85193867069.031	394968.9	3867069.031	0	0.000511153	0.000511153	0.000249246	0.000249246	1.03126E-08	1.12917E-07	0	0	1.232E-07	0.1232295
394983.85193867069.031	394983.9	3867069.031	0	0.000515637	0.000515637	0.000247107	0.000247107	1.03444E-08	1.13265E-07	0	0	1.236E-07	0.1236095
394998.85193867069.031	394998.9	3867069.031	0	0.000520311	0.000520311	0.000244968	0.000244968	1.03788E-08	1.13642E-07	0	0	1.24E-07	0.1240204
394728.85193867084.031	394728.9	3867084.031	0	0.000447044	0.000447044	0.000285436	0.000285436	9.93393E-09	1.08771E-07	0	0	1.187E-07	0.1187049
394743.85193867084.031	394743.9	3867084.031	0	0.000450288	0.000450288	0.000283695	0.000283695	9.95431E-09	1.08994E-07	0	0	1.189E-07	0.1189484
394758.85193867084.031	394758.9	3867084.031	0	0.000453436	0.000453436	0.000281953	0.000281953	9.97339E-09	1.09203E-07	0	0	1.192E-07	0.1191764
394773.85193867084.031	394773.9	3867084.031	0	0.000457061	0.000457061	0.000280013	0.000280013	9.99625E-09	1.09453E-07	0	0	1.194E-07	0.1194495
394788.85193867084.031	394788.9	3867084.031	0	0.000460782	0.000460782	0.000278024	0.000278024	1.00197E-08	1.0971E-07	0	0	1.197E-07	0.11973
394803.85193867084.031	394803.9	3867084.031	0	0.000464407	0.000464407	0.000276009	0.000276009	1.00416E-08	1.09949E-07	0	0	1.2E-07	0.119991
394818.85193867084.031	394818.9	3867084.031	0	0.000468127	0.000468127	0.000273945	0.000273945	1.0064E-08	1.10195E-07	0	0	1.203E-07	0.1202594
394833.85193867084.031	394833.9	3867084.031	0	0.00047223	0.00047223	0.000271756	0.000271756	1.009E-08	1.1048E-07	0	0	1.206E-07	0.1205695
394848.85193867084.031	394848.9	3867084.031	0	0.000476713	0.000476713	0.000269418	0.000269418	1.01191E-08	1.10798E-07	0	0	1.209E-07	0.1209172
394863.85193867084.031	394863.9	3867084.031	0	0.000480816	0.000480816	0.000267204	0.000267204	1.01447E-08	1.11079E-07	0	0	1.212E-07	0.1212233
394878.85193867084.031	394878.9	3867084.031	0	0.000484918	0.000484918	0.000264991	0.000264991	1.01703E-08	1.11359E-07	0	0	1.215E-07	0.1215294
394893.85193867084.031	394893.9	3867084.031	0	0.00048902	0.00048902	0.000262802	0.000262802	1.01962E-08	1.11643E-07	0	0	1.218E-07	0.1218394
394908.85193867084.031	394908.9	3867084.031	0	0.000492836	0.000492836	0.000260688	0.000260688	1.02193E-08	1.11896E-07	0	0	1.221E-07	0.1221152
394923.85193867084.031	394923.9	3867084.031	0	0.00049732	0.00049732	0.000258424	0.000258424	1.02494E-08	1.12226E-07	0	0	1.225E-07	0.1224751
394938.85193867084.031	394938.9	3867084.031	0	0.000501708	0.000501708	0.000256186	0.000256186	1.02786E-08	1.12545E-07	0	0	1.228E-07	0.1228235
394953.85193867084.031	394953.9	3867084.031	0	0.000506097	0.000506097	0.000253997	0.000253997	1.03084E-08	1.12872E-07	0	0	1.232E-07	0.12318
394968.85193867084.031	394968.9	3867084.031	0	0.000510294	0.000510294	0.000251858	0.000251858	1.03363E-08	1.13177E-07	0	0	1.235E-07	0.1235136
394983.85193867084.031	394983.9	3867084.031	0	0.000514969	0.000514969	0.000249644	0.000249644	1.03697E-08	1.13543E-07	0	0	1.239E-07	0.1239124
394998.85193867084.031	394998.9	3867084.031	0	0.000519739	0.000519739	0.000247431	0.000247431	1.04044E-08	1.13922E-07	0	0	1.243E-07	0.1243267
394728.85193867099.031	394728.9	3867099.031	0	0.00044609	0.00044609	0.000288918	0.000288918	9.96822E-09	1.09146E-07	0	0	1.191E-07	0.1191146
394743.85193867099.031	394743.9	3867099.031	0	0.000449524	0.000449524	0.000287077	0.000287077	9.98983E-09	1.09383E-07	0	0	1.194E-07	0.1193729
394758.85193867099.031	394758.9	3867099.031	0	0.000452863	0.000452863	0.000285212	0.000285212	1.00098E-08	1.09602E-07	0	0	1.196E-07	0.1196117
394773.85193867099.031	394773.9	3867099.031	0	0.000456393	0.000456393	0.000283247	0.000283247	1.0031E-08	1.09834E-07	0	0	1.199E-07	0.1198653
394788.85193867099.031	394788.9	3867099.031	0	0.000460305	0.000460305	0.000281133	0.000281133	1.00554E-08	1.10101E-07	0	0	1.202E-07	0.1201566
394803.85193867099.031	394803.9	3867099.031	0	0.000464025	0.000464025	0.000279068	0.000279068	1.00779E-08	1.10347E-07	0	0	1.204E-07	0.120425
394818.85193867099.031	394818.9	3867099.031	0	0.000467937	0.000467937	0.000276855	0.000276855	1.01009E-08	1.10599E-07	0	0	1.207E-07	0.1207001
394833.85193867099.031	394833.9	3867099.031	0	0.000471085	0.000471085	0.000274939	0.000274939	1.01176E-08	1.10782E-07	0	0	1.209E-07	0.1208999
394848.85193867099.031	394848.9	3867099.031	0	0.000475378	0.000475378	0.000272601	0.000272601	1.01441E-08	1.11073E-07	0	0	1.212E-07	0.1212167
394863.85193867099.031	394863.9	3867099.031	0	0.000479862	0.000479862	0.000270214	0.000270214	1.01726E-08	1.11384E-07	0	0	1.216E-07	0.1215564
394878.85193867099.031	394878.9	3867099.031	0	0.000484155	0.000484155	0.000267901	0.000267901	1.01994E-08	1.11678E-07	0	0	1.219E-07	0.1218773
394893.85193867099.031	394893.9	3867099.031	0	0.000488257	0.000488257	0.000265662	0.000265662	1.02247E-08	1.11955E-07	0	0	1.222E-07	0.1221793
394908.85193867099.031	394908.9	3867099.031	0	0.000492359	0.000492359	0.000263424	0.000263424	1.025E-08	1.12231E-07	0	0	1.225E-07	0.1224813
394923.85193867099.031	394923.9	3867099.031	0	0.000496747	0.000496747	0.00026111	0.00026111	1.02781E-08	1.1254E-07	0	0	1.228E-07	0.1228176
394938.85193867099.031	394938.9	3867099.031	0	0.000501136	0.000501136	0.000258847	0.000258847	1.03069E-08	1.12855E-07	0	0	1.232E-07	0.123162
394953.85193867099.031	394953.9	3867099.031	0	0.000505238	0.000505238	0.000256708	0.000256708	1.03336E-08	1.13147E-07	0	0	1.235E-07	0.1234802
394968.85193867099.031	394968.9	3867099.031	0	0.00050934	0.00050934	0.000254594	0.000254594	1.03605E-08	1.13442E-07	0	0	1.238E-07	0.1238024
394983.85193867099.031	394983.9	3867099.031	0	0.000514301	0.000514301	0.000252231	0.000252231	1.03957E-08	1.13828E-07	0	0	1.242E-07	0.1242234
394998.85193867099.031	394998.9	3867099.031	0	0.000519262	0.000519262	0.000249918	0.000249918	1.04317E-08	1.14221E-07	0	0	1.247E-07	0.1246524
394728.85193867114.031	394728.9	3867114.031	0	0.000445613	0.000445613	0.0002923	0.0002923	1.00076E-08	1.09578E-07	0	0	1.196E-07	0.1195855
394743.85193867114.031	394743.9	3867114.031	0	0.000449238	0.000449238	0.00029036	0.00029036	1.00305E-08	1.09828E-07	0	0	1.199E-07	0.1198586
394758.85193867114.031	394758.9	3867114.031	0	0.000452673	0.000452673	0.000288445	0.000288445	1.00511E-08	1.10054E-07	0	0	1.201E-07	0.1201048
394773.85193867114.031	394773.9	3867114.031	0	0.000456298	0.000456298	0.000286406	0.000286406	1.00726E-08	1.10289E-07	0	0	1.204E-07	0.1203618
394788.85193867114.031	394788.9	3867114.031	0	0.000460305	0.000460305	0.000284192	0.000284192	1.00969E-08	1.10555E-07	0	0	1.207E-07	0.1206523
394803.85193867114.031	394803.9	3867114.031	0	0.000464025	0.000464025	0.000282028	0.000282028	1.0118E-08	1.10787E-07	0	0	1.209E-07	0.1209046
394818.85193867114.031	394818.9	3867114.031	0	0.000467746	0.000467746	0.000279889	0.000279889	1.01395E-08	1.11021E-07	0	0	1.212E-07	0.1211609
394833.85193867114.031	394833.9	3867114.031	0	0.000471466	0.000471466	0.0002777	0.0002777	1.01602E-08	1.11249E-07	0	0	1.214E-07	0.1214092
394848.85193867114.031	394848.9	3867114.031	0	0.000475473	0.000475473	0.000275412	0.000275412	1.01835E-08	1.11504E-07	0	0	1.217E-07	0.1216877
394863.85193867114.031	394863.9	3867114.031	0	0.00047948	0.00047948	0.000273124	0.000273124	1.02069E-08	1.11759E-07	0	0	1.22E-07	0.1219662
394878.85193867114.031	394878.9	3867114.031	0	0.000483487	0.000483487	0.00027086	0.00027086	1.02305E-08	1.12018E-07	0	0	1.222E-07	0.1222487
394893.85193867114.031	394893.9	3867114.031	0	0.000487494	0.000487494	0.000268597	0.000268597	1.02541E-08	1.12277E-07	0	0	1.225E-07	0.1225313
394908.85193867114.031	394908.9	3867114.031	0	0.000491596	0.000491596	0.000266334	0.000266334	1.02791E-08	1.1255E-07	0	0	1.228E-07	0.1228293
394923.85193867114.031	394923.9	3867114.031	0	0.000495793	0.000495793	0.00026402	0.00026402	1.03046E-08	1.1283E-07	0	0	1.231E-07	0.1231346
394938.85193867114.031	394938.9	3867114.031	0	0.000499609	0.000499609	0.000261906	0.000261906	1.03277E-08	1.13083E-07	0	0	1.234E-07	0.1234104
394953.85193867114.031	394953.9	3867114.031	0	0.000503521	0.000503521	0.000259767	0.000259767	1.03518E-08	1.13346E-07	0	0	1.237E-07	0.1236977
394968.85193867114.031	394968.9	3867114.031	0	0.000508386	0.000508386	0.000257355	0.000257355	1.0385E-08	1.1371E-07	0	0	1.241E-07	0.1240952
394983.85193867114.031	394983.9	3867114.031	0	0.000513633	0.000513633	0.000254867	0.000254867	1.04224E-08	1.1412E-07	0	0	1.245E-07	0.1245424
394998.85193867114.031	394998.9	3867114.031	0	0.000518499	0.000518499	0.000252554	0.000252554	1.04571E-08	1.14499E-07	0	0	1.25E-07	0.124956
3956363867696	395636	3867696	0	0.000687643	0.000687643	0.000217086	0.000217086	1.227E-08	1.34349E-07	0	0	1.466E-07	0.1466194
3956463867696	395646	3867696	0	0.000693462	0.000693462	0.000215494	0.000215494	1.23273E-08	1.34977E-07	0	0	1.473E-07	0.1473045
3956563867696	395656	3867696	0	0.000699377	0.000699377	0.000213977	0.000213977	1.2387E-08	1.3563E-07	0	0	1.48E-07	0.1480172
3956663867696	395666	3867696	0	0.000705292	0.000705292	0.000212584	0.000212584	1.24483E-08	1.36302E-07	0	0	1.488E-07	0.14875
3956763867696	395676	3867696	0	0.000711397	0.000711397	0.000211142	0.000211142	1.25115E-08	1.36994E-07	0	0	1.495E-07	0.1495057
3956863867696	395686	3867696	0	0.000717598	0.000717598	0.000209799	0.000209799	1.25774E-08	1.37716E-07	0	0	1.503E-07	0.150293
3956963867696	395696	3867696	0	0.000723895	0.000723895	0.00020853	0.00020853	1.26456E-08	1.38462E-07	0	0	1.511E-07	0.1511078
3957063867696	395706	3867696	0	0.000730286	0.000730286	0.000207212	0.000207212	1.27144E-08	1.39216E-07	0	0	1.519E-07	0.15193
3957163867696	395716	3867696	0	0.000736869	0.000736869	0.000205919	0.000205919	1.27861E-08	1.40001E-07	0	0	1.528E-07	0.1527872
3957263867696	395726	3867696	0	0.000743547	0.000743547	0.00020465	0.00020465	1.28595E-08	1.40804E-07	0	0	1.537E-07	0.1536638
3957363867696	395736	3867696	0	0.00075032	0.00075032	0.000203456	0.000203456	1.29352E-08	1.41633E-07	0	0	1.546E-07	0.154568
3957463867696	395746	3867696	0	0.000757285	0.000757285	0.000202287	0.000202287	1.30138E-08	1.42493E-07	0	0	1.555E-07	0.1555072
3957563867696	395756	3867696	0	0.000764249	0.000764249	0.000201143	0.000201143	1.30927E-08	1.43358E-07	0	0	1.565E-07	0.1564504
3957663867696	395766	3867696	0	0.000771499	0.000771499	0.000200024	0.000200024	1.31758E-08	1.44268E-07	0	0	1.574E-07	0.157444
3957763867696	395776	3867696	0	0.00077875	0.00077875	0.000198954	0.000198954	1.32597E-08	1.45186E-07	0	0	1.584E-07	0.1584457
3957863867696	395786	3867696	0	0.000786191	0.000786191	0.000197885	0.000197885	1.33461E-08	1.46132E-07	0	0	1.595E-07	0.1594783
3957963867696	395796	3867696	0	0.000793823	0.000793823	0.000196815	0.000196815	1.34351E-08	1.47107E-07	0	0	1.605E-07	0.1605418
3958063867696	395806	3867696	0	0.00080155	0.00080155	0.000195796	0.000195796	1.35261E-08	1.48103E-07	0	0	1.616E-07	0.1616288
3958163867696	395816	3867696	0	0.000809468	0.000809468	0.000194825	0.000194825	1.36203E-08	1.49135E-07	0	0	1.628E-07	0.1627548
3958263867696	395826	3867696	0	0.000817482	0.000817482	0.00019388	0.00019388	1.37162E-08	1.50184E-07	0	0	1.639E-07	0.1639003
3956363867706	395636	3867706	0	0.000684685	0.000684685	0.000218977	0.000218977	1.22555E-08	1.34191E-07	0	0	1.464E-07	0.1464465
3956463867706	395646	3867706	0	0.000690505	0.000690505	0.000217335	0.000217335	1.23122E-08	1.34811E-07	0	0	1.471E-07	0.1471235
3956563867706	395656	3867706	0	0.000696324	0.000696324	0.000215843	0.000215843	1.23709E-08	1.35454E-07	0	0	1.478E-07	0.1478248
3956663867706	395666	3867706	0	0.000702143	0.000702143	0.000214425	0.000214425	1.24306E-08	1.36108E-07	0	0	1.485E-07	0.1485381
3956763867706	395676	3867706	0	0.000708249	0.000708249	0.000212982	0.000212982	1.24938E-08	1.368E-07	0	0	1.493E-07	0.1492938
3956863867706	395686	3867706	0	0.000714355	0.000714355	0.000211565	0.000211565	1.25574E-08	1.37496E-07	0	0	1.501E-07	0.1500535
3956963867706	395696	3867706	0	0.00072046	0.00072046	0.000210321	0.000210321	1.26233E-08	1.38218E-07	0	0	1.508E-07	0.1508414
3957063867706	395706	3867706	0	0.000726852	0.000726852	0.000208978	0.000208978	1.26918E-08	1.38968E-07	0	0	1.517E-07	0.1516596
3957163867706	395716	3867706	0	0.000733435	0.000733435	0.000207635	0.000207635	1.27628E-08	1.39746E-07	0	0	1.525E-07	0.1525087
3957263867706	395726	3867706	0	0.000739922	0.000739922	0.000206366	0.000206366	1.28336E-08	1.40521E-07	0	0	1.534E-07	0.1533545
3957363867706	395736	3867706	0	0.0007466	0.0007466	0.000205197	0.000205197	1.29083E-08	1.41339E-07	0	0	1.542E-07	0.1542472

			Projects	Transmission	Transmission	Telecommunications	Telecommunications	Child Risk					
Unique Identifier	X (UTM)	Y (UTM)	P1	P1	P1	P1	P1	3rd Trimester	0<2	2<16	16<30	Total	per million
3957463867706	395746	3867706	0	0.000753373	0.000753373	0.000204053	0.000204053	1.29847E-08	1.42175E-07	0	0	1.552E-07	0.1551595
3957563867706	395756	3867706	0	0.000760337	0.000760337	0.000202909	0.000202909	1.30636E-08	1.43039E-07	0	0	1.561E-07	0.1561027
3957663867706	395766	3867706	0	0.000767397	0.000767397	0.000201765	0.000201765	1.31438E-08	1.43918E-07	0	0	1.571E-07	0.1570614
3957763867706	395776	3867706	0	0.000774647	0.000774647	0.000200646	0.000200646	1.3227E-08	1.44828E-07	0	0	1.581E-07	0.158055
3957863867706	395786	3867706	0	0.000781898	0.000781898	0.000199601	0.000199601	1.33111E-08	1.4575E-07	0	0	1.591E-07	0.1590607
3957963867706	395796	3867706	0	0.000789434	0.000789434	0.000198531	0.000198531	1.33988E-08	1.4671E-07	0	0	1.601E-07	0.1601087
3958063867706	395806	3867706	0	0.000797066	0.000797066	0.000197462	0.000197462	1.34878E-08	1.47684E-07	0	0	1.612E-07	0.1611722
3958163867706	395816	3867706	0	0.000804889	0.000804889	0.000196442	0.000196442	1.35801E-08	1.48695E-07	0	0	1.623E-07	0.1622747
3958263867706	395826	3867706	0	0.000812712	0.000812712	0.000195522	0.000195522	1.36737E-08	1.4972E-07	0	0	1.634E-07	0.1633933
3956363867716	395636	3867716	0	0.000681728	0.000681728	0.000220966	0.000220966	1.22424E-08	1.34047E-07	0	0	1.463E-07	0.1462897
3956463867716	395646	3867716	0	0.000687452	0.000687452	0.000219375	0.000219375	1.22984E-08	1.34661E-07	0	0	1.47E-07	0.1469593
3956563867716	395656	3867716	0	0.000693176	0.000693176	0.000217857	0.000217857	1.23555E-08	1.35286E-07	0	0	1.476E-07	0.1476411
3956663867716	395666	3867716	0	0.000698995	0.000698995	0.000216365	0.000216365	1.24142E-08	1.35928E-07	0	0	1.483E-07	0.1483423
3956763867716	395676	3867716	0	0.000705005	0.000705005	0.000214873	0.000214873	1.24754E-08	1.36599E-07	0	0	1.491E-07	0.1490745
3956863867716	395686	3867716	0	0.000711111	0.000711111	0.00021343	0.00021343	1.25387E-08	1.37291E-07	0	0	1.498E-07	0.1498302
3956963867716	395696	3867716	0	0.000717121	0.000717121	0.000212211	0.000212211	1.26037E-08	1.38003E-07	0	0	1.506E-07	0.1506067
3957063867716	395706	3867716	0	0.000723418	0.000723418	0.000210843	0.000210843	1.26705E-08	1.38735E-07	0	0	1.514E-07	0.1514053
3957163867716	395716	3867716	0	0.000729809	0.000729809	0.000209525	0.000209525	1.27393E-08	1.39488E-07	0	0	1.522E-07	0.1522276
3957263867716	395726	3867716	0	0.000736297	0.000736297	0.000208306	0.000208306	1.28108E-08	1.40271E-07	0	0	1.531E-07	0.1530814
3957363867716	395736	3867716	0	0.000742784	0.000742784	0.000207162	0.000207162	1.28832E-08	1.41064E-07	0	0	1.539E-07	0.1539473
3957463867716	395746	3867716	0	0.000749462	0.000749462	0.000206043	0.000206043	1.29586E-08	1.41889E-07	0	0	1.548E-07	0.1548481
3957563867716	395756	3867716	0	0.000756331	0.000756331	0.000204849	0.000204849	1.30356E-08	1.42732E-07	0	0	1.558E-07	0.1557678
3957663867716	395766	3867716	0	0.00076339	0.00076339	0.000203605	0.000203605	1.31144E-08	1.43596E-07	0	0	1.567E-07	0.1567103
3957763867716	395776	3867716	0	0.00077045	0.00077045	0.000202436	0.000202436	1.31943E-08	1.44471E-07	0	0	1.577E-07	0.1576649
3957863867716	395786	3867716	0	0.0007777	0.0007777	0.000201392	0.000201392	1.32785E-08	1.45392E-07	0	0	1.587E-07	0.1586706
3957963867716	395796	3867716	0	0.000785046	0.000785046	0.000200322	0.000200322	1.33636E-08	1.46324E-07	0	0	1.597E-07	0.1596877
3958063867716	395806	3867716	0	0.000792583	0.000792583	0.000199203	0.000199203	1.34507E-08	1.47277E-07	0	0	1.607E-07	0.1607277
3958163867716	395816	3867716	0	0.00080031	0.00080031	0.000198134	0.000198134	1.35409E-08	1.48266E-07	0	0	1.618E-07	0.1618067
3958263867716	395826	3867716	0	0.000808037	0.000808037	0.000197213	0.000197213	1.36333E-08	1.49277E-07	0	0	1.629E-07	0.1629099
3956363867726	395636	3867726	0	0.000678866	0.000678866	0.000222981	0.000222981	1.22309E-08	1.33921E-07	0	0	1.462E-07	0.1461524
3956463867726	395646	3867726	0	0.000684399	0.000684399	0.000221464	0.000221464	1.22854E-08	1.34518E-07	0	0	1.468E-07	0.1468032
3956563867726	395656	3867726	0	0.000690028	0.000690028	0.000219947	0.000219947	1.23411E-08	1.35128E-07	0	0	1.475E-07	0.1474695
3956663867726	395666	3867726	0	0.000695847	0.000695847	0.000218429	0.000218429	1.23995E-08	1.35767E-07	0	0	1.482E-07	0.1481667
3956763867726	395676	3867726	0	0.000701762	0.000701762	0.000216887	0.000216887	1.24588E-08	1.36417E-07	0	0	1.489E-07	0.1488753
3956863867726	395686	3867726	0	0.000707867	0.000707867	0.00021542	0.00021542	1.25217E-08	1.37105E-07	0	0	1.496E-07	0.149627
3956963867726	395696	3867726	0	0.000713782	0.000713782	0.000214151	0.000214151	1.25847E-08	1.37795E-07	0	0	1.504E-07	0.1503799
3957063867726	395706	3867726	0	0.000719983	0.000719983	0.000212808	0.000212808	1.26506E-08	1.38517E-07	0	0	1.512E-07	0.1511672
3957163867726	395716	3867726	0	0.00072628	0.00072628	0.000211515	0.000211515	1.27184E-08	1.3926E-07	0	0	1.52E-07	0.151978
3957263867726	395726	3867726	0	0.000732576	0.000732576	0.000210321	0.000210321	1.27876E-08	1.40017E-07	0	0	1.528E-07	0.1528049
3957363867726	395736	3867726	0	0.000738968	0.000738968	0.000209177	0.000209177	1.28588E-08	1.40797E-07	0	0	1.537E-07	0.1536553
3957463867726	395746	3867726	0	0.00074555	0.00074555	0.000208008	0.000208008	1.29322E-08	1.416E-07	0	0	1.545E-07	0.1545327
3957563867726	395756	3867726	0	0.000752324	0.000752324	0.000206789	0.000206789	1.30075E-08	1.42425E-07	0	0	1.554E-07	0.1554328
3957663867726	395766	3867726	0	0.000759383	0.000759383	0.000205496	0.000205496	1.30857E-08	1.43282E-07	0	0	1.564E-07	0.1563673
3957763867726	395776	3867726	0	0.000766443	0.000766443	0.000204277	0.000204277	1.3165E-08	1.44149E-07	0	0	1.573E-07	0.1573139
3957863867726	395786	3867726	0	0.000773503	0.000773503	0.000203158	0.000203158	1.32455E-08	1.45031E-07	0	0	1.583E-07	0.1582766
3957963867726	395796	3867726	0	0.000780848	0.000780848	0.000202038	0.000202038	1.333E-08	1.45956E-07	0	0	1.593E-07	0.1592856
3958063867726	395806	3867726	0	0.00078829	0.00078829	0.000200919	0.000200919	1.34157E-08	1.46894E-07	0	0	1.603E-07	0.1603101
3958163867726	395816	3867726	0	0.000795731	0.000795731	0.000199875	0.000199875	1.35025E-08	1.47844E-07	0	0	1.613E-07	0.1613468
3958263867726	395826	3867726	0	0.000803363	0.000803363	0.000198929	0.000198929	1.35931E-08	1.48837E-07	0	0	1.624E-07	0.1624304
3956363867736	395636	3867736	0	0.000676004	0.000676004	0.000224946	0.000224946	1.22187E-08	1.33788E-07	0	0	1.46E-07	0.146007
3956463867736	395646	3867736	0	0.000681442	0.000681442	0.000223478	0.000223478	1.22726E-08	1.34378E-07	0	0	1.467E-07	0.1466504
3956563867736	395656	3867736	0	0.000686975	0.000686975	0.000222036	0.000222036	1.23281E-08	1.34985E-07	0	0	1.473E-07	0.1473133
3956663867736	395666	3867736	0	0.000692699	0.000692699	0.000220494	0.000220494	1.23848E-08	1.35606E-07	0	0	1.48E-07	0.147991
3956763867736	395676	3867736	0	0.000698614	0.000698614	0.000218902	0.000218902	1.24434E-08	1.36248E-07	0	0	1.487E-07	0.1486916
3956863867736	395686	3867736	0	0.000704624	0.000704624	0.00021736	0.00021736	1.2504E-08	1.36912E-07	0	0	1.494E-07	0.1494157
3956963867736	395696	3867736	0	0.000710539	0.000710539	0.000216067	0.000216067	1.25667E-08	1.37598E-07	0	0	1.502E-07	0.1501647
3957063867736	395706	3867736	0	0.000716549	0.000716549	0.000214773	0.000214773	1.26306E-08	1.38298E-07	0	0	1.509E-07	0.1509291
3957163867736	395716	3867736	0	0.000722654	0.000722654	0.00021353	0.00021353	1.26966E-08	1.3902E-07	0	0	1.517E-07	0.151717
3957263867736	395726	3867736	0	0.000728951	0.000728951	0.000212286	0.000212286	1.27651E-08	1.39771E-07	0	0	1.525E-07	0.1525358
3957363867736	395736	3867736	0	0.000735343	0.000735343	0.000211067	0.000211067	1.28353E-08	1.40539E-07	0	0	1.534E-07	0.1533742
3957463867736	395746	3867736	0	0.00074183	0.00074183	0.000209873	0.000209873	1.29071E-08	1.41325E-07	0	0	1.542E-07	0.154232
3957563867736	395756	3867736	0	0.000748508	0.000748508	0.000208655	0.000208655	1.29811E-08	1.42136E-07	0	0	1.551E-07	0.1551167
3957663867736	395766	3867736	0	0.000755377	0.000755377	0.000207361	0.000207361	1.30567E-08	1.42964E-07	0	0	1.56E-07	0.1560203
3957763867736	395776	3867736	0	0.000762341	0.000762341	0.000206167	0.000206167	1.3135E-08	1.4382E-07	0	0	1.57E-07	0.1569554
3957863867736	395786	3867736	0	0.0007694	0.0007694	0.000204998	0.000204998	1.32148E-08	1.44695E-07	0	0	1.579E-07	0.15791
3957963867736	395796	3867736	0	0.000776555	0.000776555	0.000203829	0.000203829	1.3296E-08	1.45584E-07	0	0	1.589E-07	0.1588801
3958063867736	395806	3867736	0	0.000783901	0.000783901	0.000202685	0.000202685	1.33801E-08	1.46505E-07	0	0	1.599E-07	0.1598852
3958163867736	395816	3867736	0	0.000791342	0.000791342	0.000201641	0.000201641	1.34669E-08	1.47455E-07	0	0	1.609E-07	0.1609218
3958263867736	395826	3867736	0	0.000798784	0.000798784	0.00020067	0.00020067	1.35547E-08	1.48416E-07	0	0	1.62E-07	0.1619705
3956363867746	395636	3867746	0	0.000673333	0.000673333	0.000226936	0.000226936	1.22095E-08	1.33687E-07	0	0	1.459E-07	0.1458966
3956463867746	395646	3867746	0	0.00067858	0.00067858	0.000225468	0.000225468	1.22607E-08	1.34248E-07	0	0	1.465E-07	0.1465091
3956563867746	395656	3867746	0	0.000683922	0.000683922	0.000224075	0.000224075	1.23143E-08	1.34835E-07	0	0	1.471E-07	0.1471491
3956663867746	395666	3867746	0	0.000689646	0.000689646	0.000222533	0.000222533	1.2371E-08	1.35456E-07	0	0	1.478E-07	0.1478268
3956763867746	395676	3867746	0	0.000695561	0.000695561	0.000220867	0.000220867	1.24286E-08	1.36087E-07	0	0	1.485E-07	0.1485153
3956863867746	395686	3867746	0	0.000701476	0.000701476	0.000219325	0.000219325	1.24879E-08	1.36736E-07	0	0	1.492E-07	0.149224
3956963867746	395696	3867746	0	0.000707295	0.000707295	0.000218007	0.000218007	1.2549E-08	1.37404E-07	0	0	1.5E-07	0.1499534
3957063867746	395706	3867746	0	0.000713305	0.000713305	0.000216713	0.000216713	1.2613E-08	1.38105E-07	0	0	1.507E-07	0.1507178
3957163867746	395716	3867746	0	0.000719315	0.000719315	0.000215445	0.000215445	1.26773E-08	1.38809E-07	0	0	1.515E-07	0.1514862
3957263867746	395726	3867746	0	0.000725516	0.000725516	0.000214126	0.000214126	1.27435E-08	1.39534E-07	0	0	1.523E-07	0.1522775
3957363867746	395736	3867746	0	0.000731908	0.000731908	0.000212833	0.000212833	1.28126E-08	1.40291E-07	0	0	1.531E-07	0.1531038
3957463867746	395746	3867746	0	0.000738395	0.000738395	0.000211614	0.000211614	1.28841E-08	1.41074E-07	0	0	1.54E-07	0.1539576
3957563867746	395756	3867746	0	0.000744883	0.000744883	0.000210396	0.000210396	1.29555E-08	1.41856E-07	0	0	1.548E-07	0.1548114
3957663867746	395766	3867746	0	0.000751561	0.000751561	0.000209177	0.000209177	1.30296E-08	1.42667E-07	0	0	1.557E-07	0.1556961
3957763867746	395776	3867746	0	0.000758429	0.000758429	0.000208033	0.000208033	1.31072E-08	1.43517E-07	0	0	1.566E-07	0.1566238
3957863867746	395786	3867746	0	0.000765298	0.000765298	0.000206864	0.000206864	1.31845E-08	1.44363E-07	0	0	1.575E-07	0.1575475
3957963867746	395796	3867746	0	0.000772453	0.000772453	0.00020567	0.00020567	1.32654E-08	1.45248E-07	0	0	1.585E-07	0.1585136
3958063867746	395806	3867746	0	0.000779608	0.000779608	0.000204526	0.000204526	1.33469E-08	1.46141E-07	0	0	1.595E-07	0.1594877
3958163867746	395816	3867746	0	0.000786954	0.000786954	0.000203456	0.000203456	1.3432E-08	1.47073E-07	0	0	1.605E-07	0.1605048
3958263867746	395826	3867746	0	0.0007943	0.0007943	0.000202461	0.000202461	1.35181E-08	1.48016E-07	0	0	1.615E-07	0.1615341
3956363867756	395636	3867756	0	0.000670566	0.000670566	0.000228926	0.000228926	1.2199E-08	1.33572E-07	0	0	1.458E-07	0.1457707
3956463867756	395646	3867756	0	0.000675813	0.000675813	0.000227458	0.000227458	1.22502E-08	1.34133E-07	0	0	1.464E-07	0.1463832
3956563867756	395656	3867756	0	0.000681155	0.000681155	0.00022604	0.00022604	1.23034E-08	1.34716E-07	0	0	1.47E-07	0.1470192
3956663867756	395666	3867756	0	0.000686784	0.000686784	0.000224473	0.000224473	1.23585E-08	1.35319E-07	0	0	1.477E-07	0.1476774
3956763867756	395676	3867756	0	0.000692508	0.000692508	0.000222882	0.000222882	1.24146E-08	1.35933E-07	0	0	1.483E-07	0.1483471
3956863867756	395686	3867756	0	0.000698327	0.000698327	0.000221364	0.000221364	1.24729E-08	1.36571E-07	0	0	1.49E-07	0.1490443
3956963867756	395696	3867756	0	0.000704147	0.000704147	0.000220021	0.000220021	1.25336E-08	1.37236E-07	0	0	1.498E-07	0.1497697

			Projects	Transmission	Transmission	Telecommunications	Telecommunications	Child Risk					
Unique Identifier	X (UTM)	Y (UTM)	P1	P1	P1	P1	P1	3rd Trimester	0<2	2<16	16<30	Total	per million
3957063867756	395706	3867756	0	0.000710062	0.000710062	0.000218678	0.000218678	1.25956E-08	1.37915E-07	0	0	1.505E-07	0.1505106
3957163867756	395716	3867756	0	0.000716072	0.000716072	0.000217285	0.000217285	1.26582E-08	1.38601E-07	0	0	1.513E-07	0.1512589
3957263867756	395726	3867756	0	0.000722273	0.000722273	0.000215917	0.000215917	1.27238E-08	1.39318E-07	0	0	1.52E-07	0.1520421
3957363867756	395736	3867756	0	0.000728569	0.000728569	0.000214599	0.000214599	1.27913E-08	1.40058E-07	0	0	1.528E-07	0.1528489
3957463867756	395746	3867756	0	0.000734866	0.000734866	0.000213355	0.000213355	1.28598E-08	1.40808E-07	0	0	1.537E-07	0.1536677
3957563867756	395756	3867756	0	0.000741353	0.000741353	0.000212162	0.000212162	1.29316E-08	1.41594E-07	0	0	1.545E-07	0.1545255
3957663867756	395766	3867756	0	0.000747935	0.000747935	0.000210968	0.000210968	1.30047E-08	1.42394E-07	0	0	1.554E-07	0.1553988
3957763867756	395776	3867756	0	0.000754613	0.000754613	0.000209799	0.000209799	1.30794E-08	1.43212E-07	0	0	1.563E-07	0.1562916
3957863867756	395786	3867756	0	0.000761387	0.000761387	0.000208605	0.000208605	1.31551E-08	1.44041E-07	0	0	1.572E-07	0.1571958
3957963867756	395796	3867756	0	0.000768351	0.000768351	0.000207461	0.000207461	1.3234E-08	1.44905E-07	0	0	1.581E-07	0.158139
3958063867756	395806	3867756	0	0.000775411	0.000775411	0.000206317	0.000206317	1.33142E-08	1.45783E-07	0	0	1.591E-07	0.1590977
3958163867756	395816	3867756	0	0.000782661	0.000782661	0.000205222	0.000205222	1.33977E-08	1.46698E-07	0	0	1.601E-07	0.1600953
3958263867756	395826	3867756	0	0.000789911	0.000789911	0.000204252	0.000204252	1.34829E-08	1.4763E-07	0	0	1.611E-07	0.1611131
3956363867766	395636	3867766	0	0.00066799	0.00066799	0.000230965	0.000230965	1.21917E-08	1.33492E-07	0	0	1.457E-07	0.1456838
3956463867766	395646	3867766	0	0.000673142	0.000673142	0.000229473	0.000229473	1.22413E-08	1.34035E-07	0	0	1.463E-07	0.1462768
3956563867766	395656	3867766	0	0.000678484	0.000678484	0.000227956	0.000227956	1.22932E-08	1.34603E-07	0	0	1.469E-07	0.1468967
3956663867766	395666	3867766	0	0.000683922	0.000683922	0.000226438	0.000226438	1.23464E-08	1.35186E-07	0	0	1.475E-07	0.147532
3956763867766	395676	3867766	0	0.000689551	0.000689551	0.000224871	0.000224871	1.24014E-08	1.35789E-07	0	0	1.482E-07	0.1481903
3956863867766	395686	3867766	0	0.000695275	0.000695275	0.000223379	0.000223379	1.24588E-08	1.36417E-07	0	0	1.489E-07	0.148876
3956963867766	395696	3867766	0	0.000700999	0.000700999	0.000222036	0.000222036	1.25182E-08	1.37068E-07	0	0	1.496E-07	0.149586
3957063867766	395706	3867766	0	0.000706818	0.000706818	0.000220668	0.000220668	1.25786E-08	1.37729E-07	0	0	1.503E-07	0.1503074
3957163867766	395716	3867766	0	0.000712828	0.000712828	0.000219225	0.000219225	1.26406E-08	1.38407E-07	0	0	1.51E-07	0.1510476
3957263867766	395726	3867766	0	0.000718934	0.000718934	0.000217783	0.000217783	1.27038E-08	1.39099E-07	0	0	1.518E-07	0.1518033
3957363867766	395736	3867766	0	0.000725135	0.000725135	0.000216489	0.000216489	1.27704E-08	1.39828E-07	0	0	1.526E-07	0.1525986
3957463867766	395746	3867766	0	0.000731336	0.000731336	0.000215271	0.000215271	1.28379E-08	1.40568E-07	0	0	1.534E-07	0.153406
3957563867766	395756	3867766	0	0.000737728	0.000737728	0.000214077	0.000214077	1.29084E-08	1.4134E-07	0	0	1.542E-07	0.1542484
3957663867766	395766	3867766	0	0.000744119	0.000744119	0.000212883	0.000212883	1.29789E-08	1.42112E-07	0	0	1.551E-07	0.1550908
3957763867766	395776	3867766	0	0.000750797	0.000750797	0.000211689	0.000211689	1.30533E-08	1.42926E-07	0	0	1.56E-07	0.1559795
3957863867766	395786	3867766	0	0.000757475	0.000757475	0.000210445	0.000210445	1.3127E-08	1.43733E-07	0	0	1.569E-07	0.1568602
3957963867766	395796	3867766	0	0.000764344	0.000764344	0.000209276	0.000209276	1.32043E-08	1.4458E-07	0	0	1.578E-07	0.1577839
3958063867766	395806	3867766	0	0.000771308	0.000771308	0.000208157	0.000208157	1.32836E-08	1.45448E-07	0	0	1.587E-07	0.1587312
3958163867766	395816	3867766	0	0.000778368	0.000778368	0.000207038	0.000207038	1.33641E-08	1.4633E-07	0	0	1.597E-07	0.1596938
3958263867766	395826	3867766	0	0.000785523	0.000785523	0.000206068	0.000206068	1.3448E-08	1.47248E-07	0	0	1.607E-07	0.1606962
3956363867776	395636	3867776	0	0.000665414	0.000665414	0.00023293	0.00023293	1.21834E-08	1.33401E-07	0	0	1.456E-07	0.1455848
3956463867776	395646	3867776	0	0.000670471	0.000670471	0.000231463	0.000231463	1.22321E-08	1.33934E-07	0	0	1.462E-07	0.1461664
3956563867776	395656	3867776	0	0.000675813	0.000675813	0.00022992	0.00022992	1.22836E-08	1.34499E-07	0	0	1.468E-07	0.1467822
3956663867776	395666	3867776	0	0.000681155	0.000681155	0.000228428	0.000228428	1.23358E-08	1.3507E-07	0	0	1.474E-07	0.1474062
3956763867776	395676	3867776	0	0.000686689	0.000686689	0.000226836	0.000226836	1.23893E-08	1.35656E-07	0	0	1.48E-07	0.1480449
3956863867776	395686	3867776	0	0.000692317	0.000692317	0.000225319	0.000225319	1.2445E-08	1.36266E-07	0	0	1.487E-07	0.1487112
3956963867776	395696	3867776	0	0.000697946	0.000697946	0.000224001	0.000224001	1.25035E-08	1.36906E-07	0	0	1.494E-07	0.1494097
3957063867776	395706	3867776	0	0.00070367	0.00070367	0.000222658	0.000222658	1.25629E-08	1.37557E-07	0	0	1.501E-07	0.1501197
3957163867776	395716	3867776	0	0.000709585	0.000709585	0.000221215	0.000221215	1.26236E-08	1.38221E-07	0	0	1.508E-07	0.1508444
3957263867776	395726	3867776	0	0.000715595	0.000715595	0.000219822	0.000219822	1.26862E-08	1.38907E-07	0	0	1.516E-07	0.1515927
3957363867776	395736	3867776	0	0.0007217	0.0007217	0.000218529	0.000218529	1.27514E-08	1.39621E-07	0	0	1.524E-07	0.1523726
3957463867776	395746	3867776	0	0.000727806	0.000727806	0.00021731	0.00021731	1.28177E-08	1.40347E-07	0	0	1.532E-07	0.1531645
3957563867776	395756	3867776	0	0.000734102	0.000734102	0.000216091	0.000216091	1.28866E-08	1.41101E-07	0	0	1.54E-07	0.1539874
3957663867776	395766	3867776	0	0.000740399	0.000740399	0.000214873	0.000214873	1.29554E-08	1.41855E-07	0	0	1.548E-07	0.1548103
3957763867776	395776	3867776	0	0.000746981	0.000746981	0.000213629	0.000213629	1.30279E-08	1.42648E-07	0	0	1.557E-07	0.1556755
3957863867776	395786	3867776	0	0.000753659	0.000753659	0.000212361	0.000212361	1.31012E-08	1.43451E-07	0	0	1.566E-07	0.1565522
3957963867776	395796	3867776	0	0.000760337	0.000760337	0.000211167	0.000211167	1.31756E-08	1.44265E-07	0	0	1.574E-07	0.1574409
3958063867776	395806	3867776	0	0.000767206	0.000767206	0.000210047	0.000210047	1.32536E-08	1.45119E-07	0	0	1.584E-07	0.1583727
3958163867776	395816	3867776	0	0.00077417	0.00077417	0.000208953	0.000208953	1.33332E-08	1.45991E-07	0	0	1.593E-07	0.1593239
3958263867776	395826	3867776	0	0.000781135	0.000781135	0.000207983	0.000207983	1.34145E-08	1.46881E-07	0	0	1.603E-07	0.1602954
3956363867786	395636	3867786	0	0.000662934	0.000662934	0.000234895	0.000234895	1.21764E-08	1.33325E-07	0	0	1.455E-07	0.1455012
3956463867786	395646	3867786	0	0.00066799	0.00066799	0.000233403	0.000233403	1.22247E-08	1.33854E-07	0	0	1.461E-07	0.1460788
3956563867786	395656	3867786	0	0.000673142	0.000673142	0.00023191	0.00023191	1.22744E-08	1.34397E-07	0	0	1.467E-07	0.1466718
3956663867786	395666	3867786	0	0.000678389	0.000678389	0.000230418	0.000230418	1.23253E-08	1.34955E-07	0	0	1.473E-07	0.1472803
3956763867786	395676	3867786	0	0.000683827	0.000683827	0.000228901	0.000228901	1.23785E-08	1.35537E-07	0	0	1.479E-07	0.1479156
3956863867786	395686	3867786	0	0.00068936	0.00068936	0.000227408	0.000227408	1.24333E-08	1.36137E-07	0	0	1.486E-07	0.1485705
3956963867786	395696	3867786	0	0.000694893	0.000694893	0.000226065	0.000226065	1.24901E-08	1.36759E-07	0	0	1.492E-07	0.1492495
3957063867786	395706	3867786	0	0.000700522	0.000700522	0.000224722	0.000224722	1.25482E-08	1.37396E-07	0	0	1.499E-07	0.149944
3957163867786	395716	3867786	0	0.000706341	0.000706341	0.000223354	0.000223354	1.26086E-08	1.38057E-07	0	0	1.507E-07	0.1506654
3957263867786	395726	3867786	0	0.00071216	0.00071216	0.000222036	0.000222036	1.26696E-08	1.38725E-07	0	0	1.514E-07	0.1513949
3957363867786	395736	3867786	0	0.000718171	0.000718171	0.000220743	0.000220743	1.27336E-08	1.39426E-07	0	0	1.522E-07	0.1521593
3957463867786	395746	3867786	0	0.000724276	0.000724276	0.000219424	0.000219424	1.27985E-08	1.40137E-07	0	0	1.529E-07	0.1529351
3957563867786	395756	3867786	0	0.000730477	0.000730477	0.000218131	0.000218131	1.28651E-08	1.40865E-07	0	0	1.537E-07	0.1537304
3957663867786	395766	3867786	0	0.000736774	0.000736774	0.000216862	0.000216862	1.29333E-08	1.41612E-07	0	0	1.545E-07	0.1545453
3957763867786	395776	3867786	0	0.000743165	0.000743165	0.000215619	0.000215619	1.30031E-08	1.42376E-07	0	0	1.554E-07	0.1553796
3957863867786	395786	3867786	0	0.000749748	0.000749748	0.000214375	0.000214375	1.30755E-08	1.43169E-07	0	0	1.562E-07	0.1562448
3957963867786	395796	3867786	0	0.000756426	0.000756426	0.000213181	0.000213181	1.31499E-08	1.43984E-07	0	0	1.571E-07	0.1571335
3958063867786	395806	3867786	0	0.000763104	0.000763104	0.000212037	0.000212037	1.32249E-08	1.44805E-07	0	0	1.58E-07	0.1580304
3958163867786	395816	3867786	0	0.000769973	0.000769973	0.000210943	0.000210943	1.33032E-08	1.45663E-07	0	0	1.59E-07	0.1589662
3958263867786	395826	3867786	0	0.000776842	0.000776842	0.000209973	0.000209973	1.33832E-08	1.46539E-07	0	0	1.599E-07	0.1599221
394375.783868501.64	394375.8	3868501.64	0	0.000302322	0.000302322	0.006113337	0.006113337	8.70095E-08	9.52705E-07	0	0	1.04E-06	1.039715
394221.653868546.75	394221.7	3868546.75	0	0.000284578	0.000284578	0.013519938	0.013519938	1.87218E-07	2.04993E-06	0	0	2.237E-06	2.2371455
394379.533868693.36	394379.5	3868693.36	0	0.000292782	0.000292782	0.004672454	0.004672454	6.73388E-08	7.37322E-07	0	0	8.047E-07	0.804661
394472.313868262.49	394472.3	3868262.49	0	0.000326459	0.000326459	0.002812173	0.002812173	4.25663E-08	4.66077E-07	0	0	5.086E-07	0.5086433
394612.773868269.36	394612.8	3868269.36	0	0.000344775	0.000344775	0.002995781	0.002995781	4.53048E-08	4.96062E-07	0	0	5.414E-07	0.541367
394695.623868370.62	394695.6	3868370.62	0	0.000350213	0.000350213	0.012795803	0.012795803	1.78287E-07	1.95214E-06	0	0	2.13E-06	2.1304298
394589.373868505.6	394589.4	3868505.6	0	0.000326554	0.000326554	0.005413626	0.005413626	7.78486E-08	8.52399E-07	0	0	9.302E-07	0.9302476
394587.163868554.25	394587.2	3868554.25	0	0.000324074	0.000324074	0.004469495	0.004469495	6.50106E-08	7.1183E-07	0	0	7.768E-07	0.7768407
394635.813868532.14	394635.8	3868532.14	0	0.000331801	0.000331801	0.004794602	0.004794602	6.95246E-08	7.61255E-07	0	0	8.308E-07	0.8307795
393673.773868408.29	393673.8	3868408.29	0	0.000241076	0.000241076	0.01252937	0.01252937	1.73194E-07	1.89637E-06	0	0	2.07E-06	2.0695652
393751.183868702.43	393751.2	3868702.43	0	0.000238595	0.000238595	0.006229516	0.006229516	8.77209E-08	9.60494E-07	0	0	1.048E-06	1.0482153
393748.963868766.56	393749	3868766.56	0	0.000236401	0.000236401	0.004909338	0.004909338	6.97868E-08	7.64126E-07	0	0	8.339E-07	0.8339132
393810.893868764.35	393810.9	3868764.35	0	0.000240789	0.000240789	0.010355324	0.010355324	1.43705E-07	1.57349E-06	0	0	1.717E-06	1.7171951
393815.313868806.37	393815.3	3868806.37	0	0.000239931	0.000239931	0.008133696	0.008133696	1.13564E-07	1.24346E-06	0	0	1.357E-06	1.3570213
393332.443868051.92	393332.4	3868051.92	0	0.000227624	0.000227624	0.001278317	0.001278317	2.04237E-08	2.23628E-07	0	0	2.441E-07	0.2440512
3868503858500	386850	3858500	0	0.001851712	0.001851712	2.48724E-05	2.48724E-05	2.54504E-08	2.78667E-07	0	0	3.041E-07	0.3041174
3869003858500	386900	3858500	0	0.002364964	0.002364964	2.49968E-05	2.49968E-05	3.24128E-08	3.54902E-07	0	0	3.873E-07	0.3873146
3869503858500	386950	3858500	0	0.002719375	0.002719375	2.5146E-05	2.5146E-05	3.72213E-08	4.07553E-07	0	0	4.448E-07	0.4447742
3870003858500	387000	3858500	0	0.002929445	0.002929445	2.52704E-05	2.52704E-05	4.0072E-08	4.38766E-07	0	0	4.788E-07	0.4788382
3870503858500	387050	3858500	0	0.003046978	0.003046978	2.53947E-05	2.53947E-05	4.16677E-08	4.56238E-07	0	0	4.979E-07	0.4979055
3871003858500	387100	3858500	0	0.0031668	0.0031668	2.55191E-05	2.55191E-05	4.32944E-08	4.7405E-07	0	0	5.173E-07	0.517344
3871503858500	387150	3858500	0	0.003280994	0.003280994	2.56683E-05	2.56683E-05	4.48451E-08	4.91029E-07	0	0	5.359E-07	0.5358743
3872003858500	387200	3858500	0	0.00338021	0.00338021	2.57927E-05	2.57927E-05	4.61924E-08	5.05781E-07	0	0	5.52E-07	0.5519732

			Projects	Transmission	Transmission	Telecommunications	Telecommunications	Child Risk					
Unique Identifier	X (UTM)	Y (UTM)	P1	P1	P1	P1	P1	3rd Trimester	0<2	2<16	16<30	Total	per million
3872503858500	387250	3858500	0	0.003477136	0.003477136	2.59419E-05	2.59419E-05	4.75089E-08	5.20196E-07	0	0	5.677E-07	0.5677052
3873003858500	387300	3858500	0	0.003562138	0.003562138	2.60911E-05	2.60911E-05	4.86638E-08	5.32841E-07	0	0	5.815E-07	0.5815046
3873503858500	387350	3858500	0	0.003621953	0.003621953	2.62404E-05	2.62404E-05	4.9477E-08	5.41745E-07	0	0	5.912E-07	0.5912225
3874003858500	387400	3858500	0	0.003686444	0.003686444	2.63647E-05	2.63647E-05	5.03533E-08	5.51341E-07	0	0	6.017E-07	0.6016939
3874503858500	387450	3858500	0	0.003748644	0.003748644	2.6514E-05	2.6514E-05	5.11989E-08	5.60599E-07	0	0	6.118E-07	0.6117983
3875003858500	387500	3858500	0	0.003803786	0.003803786	2.66632E-05	2.66632E-05	5.19488E-08	5.6881E-07	0	0	6.208E-07	0.6207586
3875503858500	387550	3858500	0	0.003837366	0.003837366	2.67876E-05	2.67876E-05	5.24059E-08	5.73815E-07	0	0	6.262E-07	0.6262208
3876003858500	387600	3858500	0	0.003892221	0.003892221	2.69368E-05	2.69368E-05	5.31518E-08	5.81983E-07	0	0	6.351E-07	0.6351347
3876503858500	387650	3858500	0	0.003947649	0.003947649	2.7086E-05	2.7086E-05	5.39056E-08	5.90236E-07	0	0	6.441E-07	0.6441414
3877003858500	387700	3858500	0	0.003985045	0.003985045	2.72104E-05	2.72104E-05	5.44144E-08	5.95808E-07	0	0	6.502E-07	0.650222
3877503858500	387750	3858500	0	0.004032936	0.004032936	2.73596E-05	2.73596E-05	5.5066E-08	6.02941E-07	0	0	6.58E-07	0.6580073
3878003858500	387800	3858500	0	0.004065372	0.004065372	2.7484E-05	2.7484E-05	5.55075E-08	6.07776E-07	0	0	6.633E-07	0.663284
3878503858500	387850	3858500	0	0.004092943	0.004092943	2.76084E-05	2.76084E-05	5.58831E-08	6.11889E-07	0	0	6.678E-07	0.6677722
3879003858500	387900	3858500	0	0.004139975	0.004139975	2.77576E-05	2.77576E-05	5.6523E-08	6.18895E-07	0	0	6.754E-07	0.6754184
3879503858500	387950	3858500	0	0.004177562	0.004177562	2.79068E-05	2.79068E-05	5.70348E-08	6.24499E-07	0	0	6.815E-07	0.681534
3880003858500	388000	3858500	0	0.004209998	0.004209998	2.80312E-05	2.80312E-05	5.74764E-08	6.29334E-07	0	0	6.868E-07	0.6868107
3880503858500	388050	3858500	0	0.004258939	0.004258939	2.81804E-05	2.81804E-05	5.81422E-08	6.36624E-07	0	0	6.948E-07	0.6947661
3881003858500	388100	3858500	0	0.004283361	0.004283361	2.83048E-05	2.83048E-05	5.84751E-08	6.40269E-07	0	0	6.987E-07	0.6987441
3881503858500	388150	3858500	0	0.004306257	0.004306257	2.84291E-05	2.84291E-05	5.87873E-08	6.43687E-07	0	0	7.025E-07	0.7024747
3882003858500	388200	3858500	0	0.004336785	0.004336785	2.85535E-05	2.85535E-05	5.9203E-08	6.48239E-07	0	0	7.074E-07	0.7074422
3882503858500	388250	3858500	0	0.004368172	0.004368172	2.86779E-05	2.86779E-05	5.96303E-08	6.52919E-07	0	0	7.125E-07	0.7125488
3883003858500	388300	3858500	0	0.004398795	0.004398795	2.88022E-05	2.88022E-05	6.00473E-08	6.57484E-07	0	0	7.175E-07	0.7175318
3883503858500	388350	3858500	0	0.004433711	0.004433711	2.89266E-05	2.89266E-05	6.05225E-08	6.62688E-07	0	0	7.232E-07	0.7232105
3884003858500	388400	3858500	0	0.004448212	0.004448212	2.9051E-05	2.9051E-05	6.07209E-08	6.6486E-07	0	0	7.256E-07	0.7255806
3884503858500	388450	3858500	0	0.004461663	0.004461663	2.91753E-05	2.91753E-05	6.0905E-08	6.66876E-07	0	0	7.278E-07	0.7277807
3885003858500	388500	3858500	0	0.004498392	0.004498392	2.92997E-05	2.92997E-05	6.14048E-08	6.72348E-07	0	0	7.338E-07	0.7337531
3885503858500	388550	3858500	0	0.004527108	0.004527108	2.9424E-05	2.9424E-05	6.17959E-08	6.76631E-07	0	0	7.384E-07	0.7384268
3886003858500	388600	3858500	0	0.004548477	0.004548477	2.95484E-05	2.95484E-05	6.20874E-08	6.79823E-07	0	0	7.419E-07	0.7419101
3886503858500	388650	3858500	0	0.004575189	0.004575189	2.96479E-05	2.96479E-05	6.24511E-08	6.83804E-07	0	0	7.463E-07	0.7462551
3887003858500	388700	3858500	0	0.004617547	0.004617547	2.97723E-05	2.97723E-05	6.30272E-08	6.90113E-07	0	0	7.531E-07	0.7531397
3887503858500	388750	3858500	0	0.004635673	0.004635673	2.98966E-05	2.98966E-05	6.32747E-08	6.92823E-07	0	0	7.561E-07	0.7560973
3888003858500	388800	3858500	0	0.004661526	0.004661526	3.0021E-05	3.0021E-05	6.3627E-08	6.9668E-07	0	0	7.603E-07	0.7603073
3888503858500	388850	3858500	0	0.004676886	0.004676886	3.01205E-05	3.01205E-05	6.38367E-08	6.98976E-07	0	0	7.628E-07	0.7628125
3889003858500	388900	3858500	0	0.004686998	0.004686998	3.022E-05	3.022E-05	6.39752E-08	7.00492E-07	0	0	7.645E-07	0.7644675
3889503858500	388950	3858500	0	0.004733935	0.004733935	3.03443E-05	3.03443E-05	6.46134E-08	7.07481E-07	0	0	7.721E-07	0.7720941
3890003858500	389000	3858500	0	0.004745478	0.004745478	3.04438E-05	3.04438E-05	6.47713E-08	7.0921E-07	0	0	7.74E-07	0.773981
3890503858500	389050	3858500	0	0.004814929	0.004814929	3.05682E-05	3.05682E-05	6.57149E-08	7.19541E-07	0	0	7.853E-07	0.7852563
3891003858500	389100	3858500	0	0.004829716	0.004829716	3.06677E-05	3.06677E-05	6.59168E-08	7.21752E-07	0	0	7.877E-07	0.7876688
3891503858500	389150	3858500	0	0.004855379	0.004855379	3.07423E-05	3.07423E-05	6.62659E-08	7.25574E-07	0	0	7.918E-07	0.7918397
3892003858500	389200	3858500	0	0.004884285	0.004884285	3.08418E-05	3.08418E-05	6.66592E-08	7.29881E-07	0	0	7.965E-07	0.7965404
3892503858500	389250	3858500	0	0.004929982	0.004929982	3.09413E-05	3.09413E-05	6.72803E-08	7.36682E-07	0	0	8.04E-07	0.803962
3893003858500	389300	3858500	0	0.004937995	0.004937995	3.10408E-05	3.10408E-05	6.73903E-08	7.37886E-07	0	0	8.053E-07	0.8052768
3893503858500	389350	3858500	0	0.004976537	0.004976537	3.11402E-05	3.11402E-05	6.79144E-08	7.43625E-07	0	0	8.115E-07	0.8115389
3894003858500	389400	3858500	0	0.005013075	0.005013075	3.12149E-05	3.12149E-05	6.84109E-08	7.49061E-07	0	0	8.175E-07	0.8174724
3894503858500	389450	3858500	0	0.005068216	0.005068216	3.13143E-05	3.13143E-05	6.91601E-08	7.57264E-07	0	0	8.264E-07	0.8264246
3895003858500	389500	3858500	0	0.005070029	0.005070029	3.13641E-05	3.13641E-05	6.91854E-08	7.57541E-07	0	0	8.267E-07	0.8267264
3895503858500	389550	3858500	0	0.005109524	0.005109524	3.14387E-05	3.14387E-05	6.9722E-08	7.63417E-07	0	0	8.331E-07	0.8331391
3896003858500	389600	3858500	0	0.005145585	0.005145585	3.15133E-05	3.15133E-05	7.02121E-08	7.68783E-07	0	0	8.39E-07	0.8389953
3896503858500	389650	3858500	0	0.00517764	0.00517764	3.15879E-05	3.15879E-05	7.06478E-08	7.73554E-07	0	0	8.442E-07	0.844202
3897003858500	389700	3858500	0	0.005200631	0.005200631	3.16626E-05	3.16626E-05	7.09607E-08	7.76979E-07	0	0	8.479E-07	0.8479401
3897503858500	389750	3858500	0	0.005236692	0.005236692	3.17372E-05	3.17372E-05	7.14507E-08	7.82345E-07	0	0	8.538E-07	0.8537962
3898003858500	389800	3858500	0	0.005282294	0.005282294	3.18118E-05	3.18118E-05	7.20702E-08	7.89128E-07	0	0	8.612E-07	0.8611984
3898503858500	389850	3858500	0	0.005288685	0.005288685	3.18615E-05	3.18615E-05	7.21576E-08	7.90085E-07	0	0	8.622E-07	0.8622423
3899003858500	389900	3858500	0	0.005319023	0.005319023	3.19362E-05	3.19362E-05	7.257E-08	7.94601E-07	0	0	8.672E-07	0.8671708
3899503858500	389950	3858500	0	0.00534335	0.00534335	3.19859E-05	3.19859E-05	7.29006E-08	7.98221E-07	0	0	8.711E-07	0.8711213
3900003858500	390000	3858500	0	0.005361476	0.005361476	3.20605E-05	3.20605E-05	7.31474E-08	8.00923E-07	0	0	8.741E-07	0.8740708
3900503858500	390050	3858500	0	0.005365673	0.005365673	3.21351E-05	3.21351E-05	7.32054E-08	8.01558E-07	0	0	8.748E-07	0.8747632
3901003858500	390100	3858500	0	0.005394961	0.005394961	3.21849E-05	3.21849E-05	7.36033E-08	8.05914E-07	0	0	8.795E-07	0.8795176
3901503858500	390150	3858500	0	0.005388187	0.005388187	3.22595E-05	3.22595E-05	7.35124E-08	8.0492E-07	0	0	8.784E-07	0.878432
3902003858500	390200	3858500	0	0.005400876	0.005400876	3.23092E-05	3.23092E-05	7.36852E-08	8.06811E-07	0	0	8.805E-07	0.8804963
3902503858500	390250	3858500	0	0.005404501	0.005404501	3.2359E-05	3.2359E-05	7.3735E-08	8.07357E-07	0	0	8.811E-07	0.8810919
3903003858500	390300	3858500	0	0.00541738	0.00541738	3.24336E-05	3.24336E-05	7.39107E-08	8.0928E-07	0	0	8.832E-07	0.8831911
3903503858500	390350	3858500	0	0.005427778	0.005427778	3.24833E-05	3.24833E-05	7.40524E-08	8.10832E-07	0	0	8.849E-07	0.8848844
3904003858500	390400	3858500	0	0.005427874	0.005427874	3.2558E-05	3.2558E-05	7.40547E-08	8.10857E-07	0	0	8.849E-07	0.8849119
3904503858500	390450	3858500	0	0.005416807	0.005416807	3.26077E-05	3.26077E-05	7.39053E-08	8.09221E-07	0	0	8.831E-07	0.8831266
3905003858500	390500	3858500	0	0.00542816	0.00542816	3.26823E-05	3.26823E-05	7.40603E-08	8.10918E-07	0	0	8.85E-07	0.8849784
3905503858500	390550	3858500	0	0.005419383	0.005419383	3.27321E-05	3.27321E-05	7.39419E-08	8.09622E-07	0	0	8.836E-07	0.8835641
3906003858500	390600	3858500	0	0.005414041	0.005414041	3.27818E-05	3.27818E-05	7.38701E-08	8.08836E-07	0	0	8.827E-07	0.8827064
3906503858500	390650	3858500	0	0.005411179	0.005411179	3.28316E-05	3.28316E-05	7.3832E-08	8.08419E-07	0	0	8.823E-07	0.8822507
3907003858500	390700	3858500	0	0.005373114	0.005373114	3.28564E-05	3.28564E-05	7.33161E-08	8.0277E-07	0	0	8.761E-07	0.876086
3907503858500	390750	3858500	0	0.005418906	0.005418906	3.29062E-05	3.29062E-05	7.39378E-08	8.09577E-07	0	0	8.835E-07	0.8835151
3908003858500	390800	3858500	0	0.00540679	0.00540679	3.29559E-05	3.29559E-05	7.37741E-08	8.07785E-07	0	0	8.816E-07	0.8815596
3908503858500	390850	3858500	0	0.005401543	0.005401543	3.29808E-05	3.29808E-05	7.37033E-08	8.0701E-07	0	0	8.807E-07	0.8807134
3909003858500	390900	3858500	0	0.005380746	0.005380746	3.30057E-05	3.30057E-05	7.34216E-08	8.03925E-07	0	0	8.773E-07	0.877347
3909503858500	390950	3858500	0	0.005333142	0.005333142	3.30057E-05	3.30057E-05	7.2776E-08	7.96856E-07	0	0	8.696E-07	0.8696323
3910003858500	391000	3858500	0	0.005331615	0.005331615	3.30305E-05	3.30305E-05	7.27556E-08	7.96633E-07	0	0	8.694E-07	0.8693889
3910503858500	391050	3858500	0	0.005326941	0.005326941	3.30305E-05	3.30305E-05	7.26922E-08	7.95939E-07	0	0	8.686E-07	0.8686314
3911003858500	391100	3858500	0	0.005365482	0.005365482	3.30803E-05	3.30803E-05	7.32156E-08	8.0167E-07	0	0	8.749E-07	0.8748854
3911503858500	391150	3858500	0	0.005325987	0.005325987	3.30803E-05	3.30803E-05	7.268E-08	7.95805E-07	0	0	8.685E-07	0.8684848
3912003858500	391200	3858500	0	0.005317019	0.005317019	3.30803E-05	3.30803E-05	7.25584E-08	7.94473E-07	0	0	8.67E-07	0.8670316
3912503858500	391250	3858500	0	0.00525043	0.00525043	3.30554E-05	3.30554E-05	7.16549E-08	7.84581E-07	0	0	8.562E-07	0.8562362
3913003858500	391300	3858500	0	0.005329612	0.005329612	3.30803E-05	3.30803E-05	7.27291E-08	7.96343E-07	0	0	8.691E-07	0.8690723
3913503858500	391350	3858500	0	0.00530061	0.00530061	3.30803E-05	3.30803E-05	7.23358E-08	7.92037E-07	0	0	8.644E-07	0.8643724
3914003858500	391400	3858500	0	0.005296699	0.005296699	3.30554E-05	3.30554E-05	7.22824E-08	7.91452E-07	0	0	8.637E-07	0.8637345
3914503858500	391450	3858500	0	0.00528735	0.00528735	3.30305E-05	3.30305E-05	7.21553E-08	7.9006E-07	0	0	8.622E-07	0.8622153
3915003858500	391500	3858500	0	0.005268842	0.005268842	3.30057E-05	3.30057E-05	7.1904E-08	7.87308E-07	0	0	8.592E-07	0.859212
3915503858500	391550	3858500	0	0.005259302	0.005259302	3.30057E-05	3.30057E-05	7.17746E-08	7.85891E-07	0	0	8.577E-07	0.8576659
3916003858500	391600	3858500	0	0.005252433	0.005252433	3.29808E-05	3.29808E-05	7.16811E-08	7.84868E-07	0	0	8.565E-07	0.8565487
3916503858500	391650	3858500	0	0.005235834	0.005235834	3.29559E-05	3.29559E-05	7.14556E-08	7.82399E-07	0	0	8.539E-07	0.8538546
3917003858500	391700	3858500	0	0.0052552	0.0052552	3.29559E-05	3.29559E-05	7.17183E-08	7.85275E-07	0	0	8.57E-07	0.8569931
3917503858500	391750	3858500	0	0.005249667	0.005249667	3.29311E-05	3.29311E-05	7.16429E-08	7.84449E-07	0	0	8.561E-07	0.8560923
3918003858500	391800	3858500	0	0.005228202	0.005228202	3.29062E-05	3.29062E-05	7.13514E-08	7.81258E-07	0	0	8.526E-07	0.8526097
3918503858500	391850	3858500	0	0.005209408	0.005209408	3.28564E-05	3.28564E-05	7.10959E-08	7.7846E-07	0	0	8.496E-07	0.8495559
3919003858500	391900	3858500	0	0.005188038	0.005188038	3.28316E-05	3.28316E-05	7.08057E-08	7.75283E-07	0	0	8.461E-07	0.8460888
3919503858500	391950	3858500	0	0.005198342	0.005198342	3.28067E-05	3.28067E-05	7.09451E-08	7.76809E-07	0	0	8.478E-07	0.8477545
3920003858500	392000	3858500	0	0.00520044	0.00520044	3.27569E-05	3.27569E-05	7.09729E-08	7.77114E-07	0	0	8.481E-07	0.8480865

			Projects	Transmission	Transmission	Telecommunications	Telecommunications	Child Risk					
Unique Identifier	X (UTM)	Y (UTM)	P1	P1	P1	P1	P1	3rd Trimester	0<2	2<16	16<30	Total	per million
3920503858500	392050	3858500	0	0.005201299	0.005201299	3.27321E-05	3.27321E-05	7.09842E-08	7.77237E-07	0	0	8.482E-07	0.8482216
3921003858500	392100	3858500	0	0.005195098	0.005195098	3.26823E-05	3.26823E-05	7.08995E-08	7.76309E-07	0	0	8.472E-07	0.8472087
3921503858500	392150	3858500	0	0.005203302	0.005203302	3.26575E-05	3.26575E-05	7.10104E-08	7.77524E-07	0	0	8.485E-07	0.8485342
3922003858500	392200	3858500	0	0.005208454	0.005208454	3.26077E-05	3.26077E-05	7.10796E-08	7.78281E-07	0	0	8.494E-07	0.849361
3922503858500	392250	3858500	0	0.00523488	0.00523488	3.26077E-05	3.26077E-05	7.1438E-08	7.82206E-07	0	0	8.536E-07	0.8536436
3923003858500	392300	3858500	0	0.005201681	0.005201681	3.25331E-05	3.25331E-05	7.09867E-08	7.77265E-07	0	0	8.483E-07	0.8482512
3923503858500	392350	3858500	0	0.005182791	0.005182791	3.24585E-05	3.24585E-05	7.07295E-08	7.74448E-07	0	0	8.452E-07	0.845178
3924003858500	392400	3858500	0	0.005172965	0.005172965	3.24087E-05	3.24087E-05	7.05956E-08	7.72982E-07	0	0	8.436E-07	0.8435775
3924503858500	392450	3858500	0	0.00516686	0.00516686	3.2359E-05	3.2359E-05	7.05121E-08	7.72068E-07	0	0	8.426E-07	0.84258
3925003858500	392500	3858500	0	0.005153694	0.005153694	3.22844E-05	3.22844E-05	7.03325E-08	7.70102E-07	0	0	8.404E-07	0.8404343
3925503858500	392550	3858500	0	0.005121354	0.005121354	3.22098E-05	3.22098E-05	6.98929E-08	7.65288E-07	0	0	8.352E-07	0.8351812
3926003858500	392600	3858500	0	0.005081763	0.005081763	3.216E-05	3.216E-05	6.93553E-08	7.59402E-07	0	0	8.288E-07	0.828757
3926503858500	392650	3858500	0	0.005027767	0.005027767	3.20854E-05	3.20854E-05	6.8622E-08	7.51372E-07	0	0	8.2E-07	0.8199944
3927003858500	392700	3858500	0	0.004959269	0.004959269	3.20108E-05	3.20108E-05	6.7692E-08	7.4119E-07	0	0	8.089E-07	0.8088817
3927503858500	392750	3858500	0	0.004885239	0.004885239	3.1961E-05	3.1961E-05	6.66873E-08	7.30189E-07	0	0	7.969E-07	0.7968763
3928003858500	392800	3858500	0	0.004817314	0.004817314	3.19113E-05	3.19113E-05	6.57655E-08	7.20095E-07	0	0	7.859E-07	0.7858605
3928503858500	392850	3858500	0	0.004948012	0.004948012	3.1961E-05	3.1961E-05	6.75387E-08	7.39511E-07	0	0	8.07E-07	0.8070493
3929003858500	392900	3858500	0	0.004809969	0.004809969	3.17869E-05	3.17869E-05	6.56642E-08	7.18986E-07	0	0	7.846E-07	0.7846499
3929503858500	392950	3858500	0	0.004900217	0.004900217	3.17869E-05	3.17869E-05	6.68881E-08	7.32387E-07	0	0	7.993E-07	0.7992754
3930003858500	393000	3858500	0	0.004811877	0.004811877	3.16874E-05	3.16874E-05	6.56887E-08	7.19254E-07	0	0	7.849E-07	0.7849429
3930503858500	393050	3858500	0	0.004858909	0.004858909	3.16377E-05	3.16377E-05	6.63259E-08	7.26231E-07	0	0	7.926E-07	0.7925569
3931003858500	393100	3858500	0	0.004969763	0.004969763	3.15879E-05	3.15879E-05	6.78286E-08	7.42685E-07	0	0	8.105E-07	0.8105138
3931503858500	393150	3858500	0	0.004991801	0.004991801	3.15133E-05	3.15133E-05	6.81265E-08	7.45947E-07	0	0	8.141E-07	0.8140731
3932003858500	393200	3858500	0	0.005001532	0.005001532	3.14387E-05	3.14387E-05	6.82574E-08	7.47381E-07	0	0	8.156E-07	0.8156379
3932503858500	393250	3858500	0	0.005004775	0.005004775	3.13641E-05	3.13641E-05	6.83004E-08	7.47851E-07	0	0	8.162E-07	0.8161515
3933003858500	393300	3858500	0	0.005004298	0.005004298	3.12895E-05	3.12895E-05	6.82929E-08	7.47769E-07	0	0	8.161E-07	0.8160621
3933503858500	393350	3858500	0	0.005009927	0.005009927	3.12397E-05	3.12397E-05	6.83686E-08	7.48598E-07	0	0	8.17E-07	0.8169662
3934003858500	393400	3858500	0	0.00503101	0.00503101	3.11651E-05	3.11651E-05	6.86535E-08	7.51717E-07	0	0	8.204E-07	0.8203709
3934503858500	393450	3858500	0	0.005011262	0.005011262	3.10905E-05	3.10905E-05	6.83847E-08	7.48774E-07	0	0	8.172E-07	0.8171585
3935003858500	393500	3858500	0	0.005016891	0.005016891	3.10408E-05	3.10408E-05	6.84603E-08	7.49602E-07	0	0	8.181E-07	0.8180626
3935503858500	393550	3858500	0	0.005012884	0.005012884	3.09661E-05	3.09661E-05	6.8405E-08	7.48996E-07	0	0	8.174E-07	0.8174011
3936003858500	393600	3858500	0	0.004983215	0.004983215	3.08915E-05	3.08915E-05	6.80016E-08	7.44579E-07	0	0	8.126E-07	0.8125809
3936503858500	393650	3858500	0	0.0050084	0.0050084	3.08169E-05	3.08169E-05	6.83422E-08	7.48308E-07	0	0	8.167E-07	0.8166503
3937003858500	393700	3858500	0	0.004974247	0.004974247	3.07423E-05	3.07423E-05	6.7878E-08	7.43225E-07	0	0	8.111E-07	0.8111034
3937503858500	393750	3858500	0	0.004975869	0.004975869	3.06677E-05	3.06677E-05	6.78989E-08	7.43455E-07	0	0	8.114E-07	0.8113541
3938003858500	393800	3858500	0	0.004932844	0.004932844	3.05682E-05	3.05682E-05	6.73141E-08	7.37051E-07	0	0	8.044E-07	0.8043654
3938503858500	393850	3858500	0	0.004937423	0.004937423	3.04687E-05	3.04687E-05	6.73748E-08	7.37717E-07	0	0	8.051E-07	0.8050913
3939003858500	393900	3858500	0	0.004947917	0.004947917	3.03941E-05	3.03941E-05	6.75161E-08	7.39264E-07	0	0	8.068E-07	0.8067799
3939503858500	393950	3858500	0	0.004951924	0.004951924	3.03195E-05	3.03195E-05	6.75695E-08	7.39848E-07	0	0	8.074E-07	0.8074171
3940003858500	394000	3858500	0	0.004942574	0.004942574	3.022E-05	3.022E-05	6.74413E-08	7.38445E-07	0	0	8.059E-07	0.8058859
3940503858500	394050	3858500	0	0.004948966	0.004948966	3.01453E-05	3.01453E-05	6.7527E-08	7.39383E-07	0	0	8.069E-07	0.8069096
3941003858500	394100	3858500	0	0.004953259	0.004953259	3.00707E-05	3.00707E-05	6.75842E-08	7.40009E-07	0	0	8.076E-07	0.8075933
3941503858500	394150	3858500	0	0.004929409	0.004929409	2.99464E-05	2.99464E-05	6.72591E-08	7.36449E-07	0	0	8.037E-07	0.803708
3942003858500	394200	3858500	0	0.004910615	0.004910615	2.98469E-05	2.98469E-05	6.70028E-08	7.33643E-07	0	0	8.006E-07	0.8006462
3942503858500	394250	3858500	0	0.00491405	0.00491405	2.97474E-05	2.97474E-05	6.70481E-08	7.34139E-07	0	0	8.012E-07	0.8011866
3943003858500	394300	3858500	0	0.004912619	0.004912619	2.96728E-05	2.96728E-05	6.70276E-08	7.33915E-07	0	0	8.009E-07	0.8009426
3943503858500	394350	3858500	0	0.004920823	0.004920823	2.95733E-05	2.95733E-05	6.71376E-08	7.35119E-07	0	0	8.023E-07	0.8022561
3944003858500	394400	3858500	0	0.004942384	0.004942384	2.94987E-05	2.94987E-05	6.74289E-08	7.38309E-07	0	0	8.057E-07	0.8057381
3944503858500	394450	3858500	0	0.004889437	0.004889437	2.93494E-05	2.93494E-05	6.67089E-08	7.30425E-07	0	0	7.971E-07	0.7971334
3945003858500	394500	3858500	0	0.00488295	0.00488295	2.92499E-05	2.92499E-05	6.66195E-08	7.29446E-07	0	0	7.961E-07	0.7960659
3945503858500	394550	3858500	0	0.004864633	0.004864633	2.91256E-05	2.91256E-05	6.63694E-08	7.26708E-07	0	0	7.931E-07	0.7930774
3946003858500	394600	3858500	0	0.004873028	0.004873028	2.90261E-05	2.90261E-05	6.64819E-08	7.2794E-07	0	0	7.944E-07	0.7944218
3946503858500	394650	3858500	0	0.004870929	0.004870929	2.89266E-05	2.89266E-05	6.64521E-08	7.27613E-07	0	0	7.941E-07	0.7940655
3947003858500	394700	3858500	0	0.004871692	0.004871692	2.88022E-05	2.88022E-05	6.64608E-08	7.27708E-07	0	0	7.942E-07	0.7941691
3947503858500	394750	3858500	0	0.004857478	0.004857478	2.86779E-05	2.86779E-05	6.62663E-08	7.25579E-07	0	0	7.918E-07	0.7918453
3948003858500	394800	3858500	0	0.004847842	0.004847842	2.85784E-05	2.85784E-05	6.61343E-08	7.24133E-07	0	0	7.903E-07	0.7902677
3948503858500	394850	3858500	0	0.004843645	0.004843645	2.8454E-05	2.8454E-05	6.60757E-08	7.23492E-07	0	0	7.896E-07	0.7895673
3949003858500	394900	3858500	0	0.004844599	0.004844599	2.83545E-05	2.83545E-05	6.60873E-08	7.23618E-07	0	0	7.897E-07	0.7897057
3949503858500	394950	3858500	0	0.004844885	0.004844885	2.82302E-05	2.82302E-05	6.60895E-08	7.23643E-07	0	0	7.897E-07	0.789732
3868503858550	386850	3858550	0	0.002613862	0.002613862	2.49968E-05	2.49968E-05	3.57884E-08	3.91862E-07	0	0	4.277E-07	0.4276508
3869003858550	386900	3858550	0	0.003589231	0.003589231	2.5146E-05	2.5146E-05	4.90184E-08	5.36724E-07	0	0	5.857E-07	0.5857422
3869503858550	386950	3858550	0	0.004073958	0.004073958	2.52704E-05	2.52704E-05	5.5594E-08	6.08723E-07	0	0	6.643E-07	0.6643167
3870003858550	387000	3858550	0	0.004337644	0.004337644	2.53947E-05	2.53947E-05	5.91718E-08	6.47898E-07	0	0	7.071E-07	0.7070694
3870503858550	387050	3858550	0	0.004551244	0.004551244	2.55191E-05	2.55191E-05	6.20703E-08	6.79635E-07	0	0	7.417E-07	0.7417055
3871003858550	387100	3858550	0	0.004769614	0.004769614	2.56683E-05	2.56683E-05	6.50339E-08	7.12085E-07	0	0	7.771E-07	0.7771185
3871503858550	387150	3858550	0	0.004949252	0.004949252	2.57927E-05	2.57927E-05	6.74718E-08	7.38779E-07	0	0	8.063E-07	0.8062506
3872003858550	387200	3858550	0	0.005085197	0.005085197	2.59419E-05	2.59419E-05	6.93176E-08	7.58988E-07	0	0	8.283E-07	0.8283059
3872503858550	387250	3858550	0	0.005256536	0.005256536	2.60911E-05	2.60911E-05	7.16433E-08	7.84454E-07	0	0	8.561E-07	0.856097
3873003858550	387300	3858550	0	0.005365005	0.005365005	2.62404E-05	2.62404E-05	7.31164E-08	8.00583E-07	0	0	8.737E-07	0.8736997
3873503858550	387350	3858550	0	0.005435697	0.005435697	2.63647E-05	2.63647E-05	7.40768E-08	8.11099E-07	0	0	8.852E-07	0.885176
3874003858550	387400	3858550	0	0.005528425	0.005528425	2.6514E-05	2.6514E-05	7.53364E-08	8.24891E-07	0	0	9.002E-07	0.9002277
3874503858550	387450	3858550	0	0.005647103	0.005647103	2.66632E-05	2.66632E-05	7.69479E-08	8.42537E-07	0	0	9.195E-07	0.9194846
3875003858550	387500	3858550	0	0.00573468	0.00573468	2.68124E-05	2.68124E-05	7.81377E-08	8.55564E-07	0	0	9.337E-07	0.9337015
3875503858550	387550	3858550	0	0.005801365	0.005801365	2.69617E-05	2.69617E-05	7.90441E-08	8.65488E-07	0	0	9.445E-07	0.9445325
3876003858550	387600	3858550	0	0.005861657	0.005861657	2.7086E-05	2.7086E-05	7.98635E-08	8.7446E-07	0	0	9.543E-07	0.9543236
3876503858550	387650	3858550	0	0.005942747	0.005942747	2.72353E-05	2.72353E-05	8.09652E-08	8.86524E-07	0	0	9.675E-07	0.9674892
3877003858550	387700	3858550	0	0.005986631	0.005986631	2.73596E-05	2.73596E-05	8.15621E-08	8.93059E-07	0	0	9.746E-07	0.9746211
3877503858550	387750	3858550	0	0.006073731	0.006073731	2.75089E-05	2.75089E-05	8.27454E-08	9.06015E-07	0	0	9.888E-07	0.9887606
3878003858550	387800	3858550	0	0.006143659	0.006143659	2.76581E-05	2.76581E-05	8.36958E-08	9.16422E-07	0	0	1E-06	1.0001173
3878503858550	387850	3858550	0	0.006152818	0.006152818	2.77576E-05	2.77576E-05	8.38213E-08	9.17796E-07	0	0	1.002E-06	1.0016176
3879003858550	387900	3858550	0	0.006237724	0.006237724	2.79068E-05	2.79068E-05	8.49748E-08	9.30427E-07	0	0	1.015E-06	1.0154016
3879503858550	387950	3858550	0	0.006338657	0.006338657	2.80561E-05	2.80561E-05	8.63457E-08	9.45437E-07	0	0	1.032E-06	1.0317829
3880003858550	388000	3858550	0	0.006395324	0.006395324	2.82053E-05	2.82053E-05	8.71163E-08	9.53874E-07	0	0	1.041E-06	1.0409906
3880503858550	388050	3858550	0	0.006462963	0.006462963	2.83297E-05	2.83297E-05	8.80353E-08	9.63937E-07	0	0	1.052E-06	1.0519721
3881003858550	388100	3858550	0	0.00651343	0.00651343	2.84789E-05	2.84789E-05	8.87217E-08	9.71453E-07	0	0	1.06E-06	1.0601749
3881503858550	388150	3858550	0	0.006478704	0.006478704	2.85784E-05	2.85784E-05	8.82521E-08	9.66311E-07	0	0	1.055E-06	1.0545634
3882003858550	388200	3858550	0	0.006574962	0.006574962	2.87276E-05	2.87276E-05	8.95596E-08	9.80628E-07	0	0	1.07E-06	1.0701872
3882503858550	388250	3858550	0	0.006649851	0.006649851	2.8852E-05	2.8852E-05	9.0577E-08	9.91767E-07	0	0	1.082E-06	1.0823437
3883003858550	388300	3858550	0	0.006718921	0.006718921	2.89763E-05	2.89763E-05	9.15154E-08	1.00204E-06	0	0	1.094E-06	1.0935572
3883503858550	388350	3858550	0	0.0067961	0.0067961	2.91256E-05	2.91256E-05	9.25641E-08	1.01352E-06	0	0	1.106E-06	1.1060889
3884003858550	388400	3858550	0	0.006817469	0.006817469	2.92251E-05	2.92251E-05	9.28553E-08	1.01671E-06	0	0	1.11E-06	1.1095681
3884503858550	388450	3858550	0	0.006894838	0.006894838	2.93743E-05	2.93743E-05	9.39066E-08	1.02822E-06	0	0	1.122E-06	1.1221307
3885003858550	388500	3858550	0	0.006961332	0.006961332	2.94987E-05	2.94987E-05	9.481E-08	1.03812E-06	0	0	1.133E-06	1.1329268
3885503858550	388550	3858550	0	0.006982511	0.006982511	2.95982E-05	2.95982E-05	9.50986E-08	1.04128E-06	0	0	1.136E-06	1.1363751
3886003858550	388600	3858550	0	0.007048623	0.007048623	2.97225E-05	2.97225E-05	9.59969E-08	1.05111E-06	0	0	1.147E-06	1.1471093
3886503858550	388650	3858550	0	0.007104909	0.007104909	2.98469E-05	2.98469E-05	9.6762E-08	1.05949E-06	0	0	1.156E-06	1.1562511

			Projects	Transmission	Transmission	Telecommunications	Telecommunications	Child Risk					
Unique Identifier	X (UTM)	Y (UTM)	P1	P1	P1	P1	P1	3rd Trimester	0<2	2<16	16<30	Total	per million
3887003858550	388700	3858550	0	0.007181134	0.007181134	2.99712E-05	2.99712E-05	9.77974E-08	1.07083E-06	0	0	1.169E-06	1.1686242
3887503858550	388750	3858550	0	0.007219866	0.007219866	3.00956E-05	3.00956E-05	9.83244E-08	1.0766E-06	0	0	1.175E-06	1.1749212
3888003858550	388800	3858550	0	0.0072959	0.0072959	3.022E-05	3.022E-05	9.93572E-08	1.08791E-06	0	0	1.187E-06	1.1872633
3888503858550	388850	3858550	0	0.007364492	0.007364492	3.03195E-05	3.03195E-05	1.00289E-07	1.09811E-06	0	0	1.198E-06	1.1983955
3889003858550	388900	3858550	0	0.007431272	0.007431272	3.04438E-05	3.04438E-05	1.01196E-07	1.10804E-06	0	0	1.209E-06	1.2092379
3889503858550	388950	3858550	0	0.007492996	0.007492996	3.05682E-05	3.05682E-05	1.02035E-07	1.11723E-06	0	0	1.219E-06	1.219261
3890003858550	389000	3858550	0	0.007592975	0.007592975	3.06677E-05	3.06677E-05	1.03392E-07	1.13209E-06	0	0	1.235E-06	1.2354796
3890503858550	389050	3858550	0	0.007682365	0.007682365	3.0792E-05	3.0792E-05	1.04606E-07	1.14538E-06	0	0	1.25E-06	1.2499862
3891003858550	389100	3858550	0	0.007670058	0.007670058	3.08666E-05	3.08666E-05	1.0444E-07	1.14356E-06	0	0	1.248E-06	1.2480039
3891503858550	389150	3858550	0	0.007717281	0.007717281	3.09661E-05	3.09661E-05	1.05082E-07	1.15059E-06	0	0	1.256E-06	1.2556729
3892003858550	389200	3858550	0	0.007792838	0.007792838	3.10656E-05	3.10656E-05	1.06108E-07	1.16183E-06	0	0	1.268E-06	1.2679337
3892503858550	389250	3858550	0	0.007926207	0.007926207	3.119E-05	3.119E-05	1.07919E-07	1.18165E-06	0	0	1.29E-06	1.2895675
3893003858550	389300	3858550	0	0.007970091	0.007970091	3.12646E-05	3.12646E-05	1.08515E-07	1.18818E-06	0	0	1.297E-06	1.2966914
3893503858550	389350	3858550	0	0.00799623	0.00799623	3.13392E-05	3.13392E-05	1.0887E-07	1.19207E-06	0	0	1.301E-06	1.3009396
3894003858550	389400	3858550	0	0.008083521	0.008083521	3.14387E-05	3.14387E-05	1.10056E-07	1.20505E-06	0	0	1.315E-06	1.315102
3894503858550	389450	3858550	0	0.008255718	0.008255718	3.15382E-05	3.15382E-05	1.12392E-07	1.23063E-06	0	0	1.343E-06	1.3430242
3895003858550	389500	3858550	0	0.008250662	0.008250662	3.15879E-05	3.15879E-05	1.12324E-07	1.22989E-06	0	0	1.342E-06	1.3422128
3895503858550	389550	3858550	0	0.008322212	0.008322212	3.16626E-05	3.16626E-05	1.13296E-07	1.24052E-06	0	0	1.354E-06	1.3538202
3896003858550	389600	3858550	0	0.00842305	0.00842305	3.17621E-05	3.17621E-05	1.14665E-07	1.25551E-06	0	0	1.37E-06	1.370178
3896503858550	389650	3858550	0	0.008495744	0.008495744	3.18118E-05	3.18118E-05	1.15651E-07	1.26632E-06	0	0	1.382E-06	1.3819669
3897003858550	389700	3858550	0	0.008588569	0.008588569	3.18864E-05	3.18864E-05	1.16911E-07	1.28011E-06	0	0	1.397E-06	1.397022
3897503858550	389750	3858550	0	0.008666033	0.008666033	3.1961E-05	3.1961E-05	1.17963E-07	1.29163E-06	0	0	1.41E-06	1.4095879
3898003858550	389800	3858550	0	0.008731001	0.008731001	3.20356E-05	3.20356E-05	1.18845E-07	1.30128E-06	0	0	1.42E-06	1.4201286
3898503858550	389850	3858550	0	0.008784902	0.008784902	3.20854E-05	3.20854E-05	1.19576E-07	1.3093E-06	0	0	1.429E-06	1.4288718
3899003858550	389900	3858550	0	0.008840997	0.008840997	3.216E-05	3.216E-05	1.20338E-07	1.31764E-06	0	0	1.438E-06	1.4379746
3899503858550	389950	3858550	0	0.00888822	0.00888822	3.22346E-05	3.22346E-05	1.2098E-07	1.32466E-06	0	0	1.446E-06	1.4456396
3900003858550	390000	3858550	0	0.008884213	0.008884213	3.22844E-05	3.22844E-05	1.20926E-07	1.32407E-06	0	0	1.445E-06	1.4449983
3900503858550	390050	3858550	0	0.008988008	0.008988008	3.2359E-05	3.2359E-05	1.22335E-07	1.3395E-06	0	0	1.462E-06	1.4618313
3901003858550	390100	3858550	0	0.009115749	0.009115749	3.24336E-05	3.24336E-05	1.24068E-07	1.35848E-06	0	0	1.483E-06	1.4825449
3901503858550	390150	3858550	0	0.009038856	0.009038856	3.24833E-05	3.24833E-05	1.23026E-07	1.34707E-06	0	0	1.47E-06	1.4700919
3902003858550	390200	3858550	0	0.009037807	0.009037807	3.25331E-05	3.25331E-05	1.23012E-07	1.34692E-06	0	0	1.47E-06	1.4699299
3902503858550	390250	3858550	0	0.009039238	0.009039238	3.26077E-05	3.26077E-05	1.23033E-07	1.34714E-06	0	0	1.47E-06	1.4701739
3903003858550	390300	3858550	0	0.009082549	0.009082549	3.26575E-05	3.26575E-05	1.23621E-07	1.35358E-06	0	0	1.477E-06	1.4772009
3903503858550	390350	3858550	0	0.009090658	0.009090658	3.27321E-05	3.27321E-05	1.23732E-07	1.3548E-06	0	0	1.479E-06	1.4785272
3904003858550	390400	3858550	0	0.009065854	0.009065854	3.27818E-05	3.27818E-05	1.23396E-07	1.35112E-06	0	0	1.475E-06	1.4745155
3904503858550	390450	3858550	0	0.009003177	0.009003177	3.28316E-05	3.28316E-05	1.22547E-07	1.34182E-06	0	0	1.464E-06	1.4643661
3905003858550	390500	3858550	0	0.008936301	0.008936301	3.28813E-05	3.28813E-05	1.21641E-07	1.3319E-06	0	0	1.454E-06	1.4535364
3905503858550	390550	3858550	0	0.008941548	0.008941548	3.29559E-05	3.29559E-05	1.21713E-07	1.33269E-06	0	0	1.454E-06	1.4543988
3906003858550	390600	3858550	0	0.008913405	0.008913405	3.30057E-05	3.30057E-05	1.21332E-07	1.32851E-06	0	0	1.45E-06	1.4498461
3906503858550	390650	3858550	0	0.008893848	0.008893848	3.30554E-05	3.30554E-05	1.21067E-07	1.32562E-06	0	0	1.447E-06	1.4466847
3907003858550	390700	3858550	0	0.008990107	0.008990107	3.31052E-05	3.31052E-05	1.22373E-07	1.33992E-06	0	0	1.462E-06	1.4622924
3907503858550	390750	3858550	0	0.008893371	0.008893371	3.313E-05	3.313E-05	1.21062E-07	1.32556E-06	0	0	1.447E-06	1.4466195
3908003858550	390800	3858550	0	0.008910448	0.008910448	3.31798E-05	3.31798E-05	1.21294E-07	1.3281E-06	0	0	1.449E-06	1.449395
3908503858550	390850	3858550	0	0.008989153	0.008989153	3.32295E-05	3.32295E-05	1.22362E-07	1.3398E-06	0	0	1.462E-06	1.4621579
3909003858550	390900	3858550	0	0.00886332	0.00886332	3.32295E-05	3.32295E-05	1.20656E-07	1.32111E-06	0	0	1.442E-06	1.4417656
3909503858550	390950	3858550	0	0.008691505	0.008691505	3.32295E-05	3.32295E-05	1.18325E-07	1.2956E-06	0	0	1.414E-06	1.4139214
3910003858550	391000	3858550	0	0.008696084	0.008696084	3.32544E-05	3.32544E-05	1.18388E-07	1.29628E-06	0	0	1.415E-06	1.4146676
3910503858550	391050	3858550	0	0.00869742	0.00869742	3.32793E-05	3.32793E-05	1.18406E-07	1.29648E-06	0	0	1.415E-06	1.414888
3911003858550	391100	3858550	0	0.008550027	0.008550027	3.32793E-05	3.32793E-05	1.16407E-07	1.27459E-06	0	0	1.391E-06	1.3910017
3911503858550	391150	3858550	0	0.008546783	0.008546783	3.32793E-05	3.32793E-05	1.16363E-07	1.27411E-06	0	0	1.39E-06	1.390476
3912003858550	391200	3858550	0	0.008508433	0.008508433	3.32793E-05	3.32793E-05	1.15843E-07	1.26842E-06	0	0	1.384E-06	1.384261
3912503858550	391250	3858550	0	0.008432399	0.008432399	3.32793E-05	3.32793E-05	1.14812E-07	1.25713E-06	0	0	1.372E-06	1.371939
3913003858550	391300	3858550	0	0.008698565	0.008698565	3.3329E-05	3.3329E-05	1.18422E-07	1.29666E-06	0	0	1.415E-06	1.4150816
3913503858550	391350	3858550	0	0.008611751	0.008611751	3.33041E-05	3.33041E-05	1.17245E-07	1.28376E-06	0	0	1.401E-06	1.4010086
3914003858550	391400	3858550	0	0.008527036	0.008527036	3.32793E-05	3.32793E-05	1.16095E-07	1.27118E-06	0	0	1.387E-06	1.3872757
3914503858550	391450	3858550	0	0.008465312	0.008465312	3.32544E-05	3.32544E-05	1.15258E-07	1.26201E-06	0	0	1.377E-06	1.3772688
3915003858550	391500	3858550	0	0.008472085	0.008472085	3.32295E-05	3.32295E-05	1.1535E-07	1.26301E-06	0	0	1.378E-06	1.3783625
3915503858550	391550	3858550	0	0.008438123	0.008438123	3.32295E-05	3.32295E-05	1.14889E-07	1.25797E-06	0	0	1.373E-06	1.3728586
3916003858550	391600	3858550	0	0.008401203	0.008401203	3.32046E-05	3.32046E-05	1.14388E-07	1.25248E-06	0	0	1.367E-06	1.3668714
3916503858550	391650	3858550	0	0.008362757	0.008362757	3.31798E-05	3.31798E-05	1.13866E-07	1.24677E-06	0	0	1.361E-06	1.3606368
3917003858550	391700	3858550	0	0.008436787	0.008436787	3.31798E-05	3.31798E-05	1.1487E-07	1.25776E-06	0	0	1.373E-06	1.3726341
3917503858550	391750	3858550	0	0.00848029	0.00848029	3.31798E-05	3.31798E-05	1.1546E-07	1.26422E-06	0	0	1.38E-06	1.379684
3918003858550	391800	3858550	0	0.008359513	0.008359513	3.313E-05	3.313E-05	1.13822E-07	1.24628E-06	0	0	1.36E-06	1.3601031
3918503858550	391850	3858550	0	0.008262587	0.008262587	3.30803E-05	3.30803E-05	1.12506E-07	1.23188E-06	0	0	1.344E-06	1.3443872
3919003858550	391900	3858550	0	0.008233872	0.008233872	3.30554E-05	3.30554E-05	1.12117E-07	1.22761E-06	0	0	1.34E-06	1.3397296
3919503858550	391950	3858550	0	0.008277183	0.008277183	3.30305E-05	3.30305E-05	1.12704E-07	1.23404E-06	0	0	1.347E-06	1.3467446
3920003858550	392000	3858550	0	0.008299507	0.008299507	3.30057E-05	3.30057E-05	1.13006E-07	1.23735E-06	0	0	1.35E-06	1.3503583
3920503858550	392050	3858550	0	0.008267643	0.008267643	3.29559E-05	3.29559E-05	1.12573E-07	1.23261E-06	0	0	1.345E-06	1.3451865
3921003858550	392100	3858550	0	0.008277088	0.008277088	3.29311E-05	3.29311E-05	1.12701E-07	1.23401E-06	0	0	1.347E-06	1.346713
3921503858550	392150	3858550	0	0.008271459	0.008271459	3.28813E-05	3.28813E-05	1.12624E-07	1.23317E-06	0	0	1.346E-06	1.3457928
3922003858550	392200	3858550	0	0.008278423	0.008278423	3.28316E-05	3.28316E-05	1.12718E-07	1.2342E-06	0	0	1.347E-06	1.3469133
3922503858550	392250	3858550	0	0.008274321	0.008274321	3.28067E-05	3.28067E-05	1.12662E-07	1.23358E-06	0	0	1.346E-06	1.3462445
3923003858550	392300	3858550	0	0.008249708	0.008249708	3.27569E-05	3.27569E-05	1.12327E-07	1.22992E-06	0	0	1.342E-06	1.3422477
3923503858550	392350	3858550	0	0.008203535	0.008203535	3.26823E-05	3.26823E-05	1.117E-07	1.22305E-06	0	0	1.335E-06	1.3347527
3924003858550	392400	3858550	0	0.008134274	0.008134274	3.26077E-05	3.26077E-05	1.1076E-07	1.21276E-06	0	0	1.324E-06	1.3235164
3924503858550	392450	3858550	0	0.008088005	0.008088005	3.2558E-05	3.2558E-05	1.10132E-07	1.20588E-06	0	0	1.316E-06	1.31601
3925003858550	392500	3858550	0	0.008077893	0.008077893	3.24833E-05	3.24833E-05	1.09993E-07	1.20437E-06	0	0	1.314E-06	1.3143591
3925503858550	392550	3858550	0	0.00797944	0.00797944	3.24087E-05	3.24087E-05	1.08657E-07	1.18973E-06	0	0	1.298E-06	1.2983919
3926003858550	392600	3858550	0	0.007883182	0.007883182	3.2359E-05	3.2359E-05	1.07351E-07	1.17543E-06	0	0	1.283E-06	1.2827843
3926503858550	392650	3858550	0	0.007808006	0.007808006	3.22844E-05	3.22844E-05	1.0633E-07	1.16426E-06	0	0	1.271E-06	1.2705894
3927003858550	392700	3858550	0	0.007654794	0.007654794	3.22346E-05	3.22346E-05	1.04252E-07	1.1415E-06	0	0	1.246E-06	1.2457519
3927503858550	392750	3858550	0	0.007395879	0.007395879	3.21849E-05	3.21849E-05	1.0074E-07	1.10304E-06	0	0	1.204E-06	1.2037843
3928003858550	392800	3858550	0	0.007231123	0.007231123	3.21351E-05	3.21351E-05	9.85047E-08	1.07857E-06	0	0	1.177E-06	1.1770761
3928503858550	392850	3858550	0	0.007708218	0.007708218	3.23092E-05	3.23092E-05	1.04977E-07	1.14944E-06	0	0	1.254E-06	1.2544218
3929003858550	392900	3858550	0	0.007326809	0.007326809	3.19859E-05	3.19859E-05	9.98004E-08	1.09276E-06	0	0	1.193E-06	1.1925587
3929503858550	392950	3858550	0	0.007299811	0.007299811	3.19859E-05	3.19859E-05	9.94342E-08	1.08875E-06	0	0	1.188E-06	1.1881834
3930003858550	393000	3858550	0	0.007296663	0.007296663	3.19362E-05	3.19362E-05	9.93909E-08	1.08827E-06	0	0	1.188E-06	1.1876651
3930503858550	393050	3858550	0	0.007354761	0.007354761	3.18367E-05	3.18367E-05	1.00177E-07	1.09689E-06	0	0	1.197E-06	1.1970644
3931003858550	393100	3858550	0	0.007582386	0.007582386	3.17869E-05	3.17869E-05	1.03264E-07	1.13068E-06	0	0	1.234E-06	1.2339449
3931503858550	393150	3858550	0	0.007693145	0.007693145	3.17123E-05	3.17123E-05	1.04765E-07	1.14712E-06	0	0	1.252E-06	1.2518823
3932003858550	393200	3858550	0	0.007766317	0.007766317	3.16626E-05	3.16626E-05	1.05757E-07	1.15798E-06	0	0	1.264E-06	1.2637324
3932503858550	393250	3858550	0	0.007753342	0.007753342	3.15879E-05	3.15879E-05	1.0558E-07	1.15604E-06	0	0	1.262E-06	1.2616177
3933003858550	393300	3858550	0	0.00772663	0.00772663	3.15133E-05	3.15133E-05	1.05216E-07	1.15206E-06	0	0	1.257E-06	1.2572767
3933503858550	393350	3858550	0	0.007800088	0.007800088	3.14636E-05	3.14636E-05	1.06212E-07	1.16296E-06	0	0	1.269E-06	1.2691732
3934003858550	393400	3858550	0	0.007705547	0.007705547	3.1389E-05	3.1389E-05	1.04929E-07	1.14891E-06	0	0	1.254E-06	1.2538398
3934503858550	393450	3858550	0	0.007714705	0.007714705	3.13143E-05	3.13143E-05	1.05052E-07	1.15026E-06	0	0	1.255E-06	1.2553119

			Projects	Transmission	Transmission	Telecommunications	Telecommunications	Child Risk					
Unique Identifier	X (UTM)	Y (UTM)	P1	P1	P1	P1	P1	3rd Trimester	0<2	2<16	16<30	Total	per million
3935003858550	393500	3858550	0	0.007742753	0.007742753	3.12646E-05	3.12646E-05	1.05432E-07	1.15442E-06	0	0	1.26E-06	1.2598492
3935503858550	393550	3858550	0	0.007653459	0.007653459	3.11651E-05	3.11651E-05	1.04219E-07	1.14114E-06	0	0	1.245E-06	1.2453621
3936003858550	393600	3858550	0	0.007658801	0.007658801	3.10905E-05	3.10905E-05	1.04291E-07	1.14193E-06	0	0	1.246E-06	1.2462158
3936503858550	393650	3858550	0	0.007638672	0.007638672	3.10159E-05	3.10159E-05	1.04017E-07	1.13892E-06	0	0	1.243E-06	1.2429416
3937003858550	393700	3858550	0	0.007634951	0.007634951	3.09661E-05	3.09661E-05	1.03966E-07	1.13836E-06	0	0	1.242E-06	1.2423306
3937503858550	393750	3858550	0	0.007563973	0.007563973	3.08666E-05	3.08666E-05	1.03002E-07	1.12781E-06	0	0	1.231E-06	1.2308119
3938003858550	393800	3858550	0	0.007446441	0.007446441	3.07423E-05	3.07423E-05	1.01406E-07	1.11034E-06	0	0	1.212E-06	1.2117445
3938503858550	393850	3858550	0	0.007508737	0.007508737	3.06925E-05	3.06925E-05	1.0225E-07	1.11958E-06	0	0	1.222E-06	1.2218321
3939003858550	393900	3858550	0	0.007596696	0.007596696	3.06179E-05	3.06179E-05	1.03442E-07	1.13263E-06	0	0	1.236E-06	1.2360745
3939503858550	393950	3858550	0	0.007558345	0.007558345	3.05184E-05	3.05184E-05	1.02921E-07	1.12692E-06	0	0	1.23E-06	1.2298433
3940003858550	394000	3858550	0	0.00749042	0.00749042	3.04189E-05	3.04189E-05	1.01998E-07	1.11682E-06	0	0	1.219E-06	1.2188194
3940503858550	394050	3858550	0	0.007474107	0.007474107	3.03195E-05	3.03195E-05	1.01775E-07	1.11438E-06	0	0	1.216E-06	1.2161595
3941003858550	394100	3858550	0	0.007489466	0.007489466	3.02448E-05	3.02448E-05	1.01983E-07	1.11665E-06	0	0	1.219E-06	1.2186365
3941503858550	394150	3858550	0	0.007439477	0.007439477	3.01453E-05	3.01453E-05	1.01303E-07	1.10922E-06	0	0	1.211E-06	1.2105192
3942003858550	394200	3858550	0	0.007421541	0.007421541	3.00459E-05	3.00459E-05	1.01059E-07	1.10654E-06	0	0	1.208E-06	1.2075965
3942503858550	394250	3858550	0	0.007417439	0.007417439	2.99464E-05	2.99464E-05	1.01002E-07	1.10591E-06	0	0	1.207E-06	1.2069156
3943003858550	394300	3858550	0	0.007391872	0.007391872	2.98469E-05	2.98469E-05	1.00654E-07	1.1021E-06	0	0	1.203E-06	1.202756
3943503858550	394350	3858550	0	0.007385289	0.007385289	2.97474E-05	2.97474E-05	1.00563E-07	1.10111E-06	0	0	1.202E-06	1.2016732
3944003858550	394400	3858550	0	0.007431463	0.007431463	2.96728E-05	2.96728E-05	1.01188E-07	1.10796E-06	0	0	1.209E-06	1.2091439
3944503858550	394450	3858550	0	0.007341119	0.007341119	2.95235E-05	2.95235E-05	9.99611E-08	1.09452E-06	0	0	1.194E-06	1.1944787
3945003858550	394500	3858550	0	0.007326141	0.007326141	2.9424E-05	2.9424E-05	9.97566E-08	1.09228E-06	0	0	1.192E-06	1.1920353
3945503858550	394550	3858550	0	0.007284452	0.007284452	2.92997E-05	2.92997E-05	9.91895E-08	1.08607E-06	0	0	1.185E-06	1.1852589
3946003858550	394600	3858550	0	0.007304867	0.007304867	2.92002E-05	2.92002E-05	9.9465E-08	1.08909E-06	0	0	1.189E-06	1.1885513
3946503858550	394650	3858550	0	0.007286264	0.007286264	2.91007E-05	2.91007E-05	9.92114E-08	1.08631E-06	0	0	1.186E-06	1.1855204
3947003858550	394700	3858550	0	0.007246673	0.007246673	2.89763E-05	2.89763E-05	9.86728E-08	1.08041E-06	0	0	1.179E-06	1.1790842
3947503858550	394750	3858550	0	0.007215859	0.007215859	2.8852E-05	2.8852E-05	9.82532E-08	1.07582E-06	0	0	1.174E-06	1.1740704
3948003858550	394800	3858550	0	0.007191628	0.007191628	2.87276E-05	2.87276E-05	9.79229E-08	1.0722E-06	0	0	1.17E-06	1.1701233
3948503858550	394850	3858550	0	0.007193345	0.007193345	2.86281E-05	2.86281E-05	9.79448E-08	1.07244E-06	0	0	1.17E-06	1.1703854
3949003858550	394900	3858550	0	0.007185999	0.007185999	2.85038E-05	2.85038E-05	9.78435E-08	1.07133E-06	0	0	1.169E-06	1.1691748
3949503858550	394950	3858550	0	0.007137631	0.007137631	2.83794E-05	2.83794E-05	9.71858E-08	1.06413E-06	0	0	1.161E-06	1.1613162
3868503858600	386850	3858600	0	0.004615257	0.004615257	2.51211E-05	2.51211E-05	6.29331E-08	6.89082E-07	0	0	7.52E-07	0.7520149
3869003858600	386900	3858600	0	0.006938818	0.006938818	2.52704E-05	2.52704E-05	9.44474E-08	1.03415E-06	0	0	1.129E-06	1.1285929
3869503858600	386950	3858600	0	0.007938037	0.007938037	2.53947E-05	2.53947E-05	1.08001E-07	1.18254E-06	0	0	1.291E-06	1.2905454
3870003858600	387000	3858600	0	0.008728616	0.008728616	2.5544E-05	2.5544E-05	1.18724E-07	1.29997E-06	0	0	1.419E-06	1.41869
3870503858600	387050	3858600	0	0.008902244	0.008902244	2.56683E-05	2.56683E-05	1.21081E-07	1.32577E-06	0	0	1.447E-06	1.4468481
3871003858600	387100	3858600	0	0.009382773	0.009382773	2.57927E-05	2.57927E-05	1.276E-07	1.39714E-06	0	0	1.525E-06	1.5247424
3871503858600	387150	3858600	0	0.009788509	0.009788509	2.59419E-05	2.59419E-05	1.33104E-07	1.45742E-06	0	0	1.591E-06	1.5905197
3872003858600	387200	3858600	0	0.010138817	0.010138817	2.60911E-05	2.60911E-05	1.37857E-07	1.50946E-06	0	0	1.647E-06	1.6473145
3872503858600	387250	3858600	0	0.010456976	0.010456976	2.62404E-05	2.62404E-05	1.42174E-07	1.55673E-06	0	0	1.699E-06	1.6988992
3873003858600	387300	3858600	0	0.010608662	0.010608662	2.63896E-05	2.63896E-05	1.44233E-07	1.57927E-06	0	0	1.724E-06	1.7235054
3873503858600	387350	3858600	0	0.010766835	0.010766835	2.6514E-05	2.6514E-05	1.4638E-07	1.60278E-06	0	0	1.749E-06	1.7491589
3874003858600	387400	3858600	0	0.011031093	0.011031093	2.66632E-05	2.66632E-05	1.49666E-07	1.64204E-06	0	0	1.792E-06	1.7920084
3874503858600	387450	3858600	0	0.011256618	0.011256618	2.68124E-05	2.68124E-05	1.53027E-07	1.67555E-06	0	0	1.829E-06	1.828581
3875003858600	387500	3858600	0	0.011519922	0.011519922	2.69617E-05	2.69617E-05	1.56599E-07	1.71468E-06	0	0	1.871E-06	1.871276
3875503858600	387550	3858600	0	0.011689925	0.011689925	2.71109E-05	2.71109E-05	1.58907E-07	1.73994E-06	0	0	1.899E-06	1.8988506
3876003858600	387600	3858600	0	0.011807553	0.011807553	2.72353E-05	2.72353E-05	1.60504E-07	1.75743E-06	0	0	1.918E-06	1.9179334
3876503858600	387650	3858600	0	0.012048056	0.012048056	2.73845E-05	2.73845E-05	1.63768E-07	1.79317E-06	0	0	1.957E-06	1.9569333
3877003858600	387700	3858600	0	0.012103674	0.012103674	2.75089E-05	2.75089E-05	1.64524E-07	1.80144E-06	0	0	1.966E-06	1.9659669
3877503858600	387750	3858600	0	0.012385581	0.012385581	2.76581E-05	2.76581E-05	1.68349E-07	1.84333E-06	0	0	2.012E-06	2.0116766
3878003858600	387800	3858600	0	0.012643542	0.012643542	2.78073E-05	2.78073E-05	1.7185E-07	1.88166E-06	0	0	2.054E-06	2.0535057
3878503858600	387850	3858600	0	0.012706125	0.012706125	2.79317E-05	2.79317E-05	1.727E-07	1.89097E-06	0	0	2.064E-06	2.0636679
3876003858650	387600	3858650	0	0.02754854	0.02754854	2.74094E-05	2.74094E-05	3.73987E-07	4.09494E-06	0	0	4.469E-06	4.4689296
3876503858650	387650	3858650	0	0.02731128	0.02731128	2.75586E-05	2.75586E-05	3.70771E-07	4.05973E-06	0	0	4.431E-06	4.4305038
3877003858650	387700	3858650	0	0.026293554	0.026293554	2.76581E-05	2.76581E-05	3.5697E-07	3.90862E-06	0	0	4.266E-06	4.2655882
3877503858650	387750	3858650	0	0.025838687	0.025838687	2.78073E-05	2.78073E-05	3.50803E-07	3.84109E-06	0	0	4.192E-06	4.1918971
3878003858650	387800	3858650	0	0.025657236	0.025657236	2.79317E-05	2.79317E-05	3.48344E-07	3.81417E-06	0	0	4.163E-06	4.1625116
3878503858650	387850	3858650	0	0.025807396	0.025807396	2.80809E-05	2.80809E-05	3.50382E-07	3.83649E-06	0	0	4.187E-06	4.1868705
3879003858650	387900	3858650	0	0.026210556	0.026210556	2.82302E-05	2.82302E-05	3.55852E-07	3.89638E-06	0	0	4.252E-06	4.2522303
3879503858650	387950	3858650	0	0.026060015	0.026060015	2.84043E-05	2.84043E-05	3.53813E-07	3.87405E-06	0	0	4.228E-06	4.227862
3880003858650	388000	3858650	0	0.025794994	0.025794994	2.85535E-05	2.85535E-05	3.5022E-07	3.83472E-06	0	0	4.185E-06	4.1849372
3880503858650	388050	3858650	0	0.025642354	0.025642354	2.86779E-05	2.86779E-05	3.48152E-07	3.81207E-06	0	0	4.16E-06	4.1602207
3881003858650	388100	3858650	0	0.025448406	0.025448406	2.88271E-05	2.88271E-05	3.45524E-07	3.78329E-06	0	0	4.129E-06	4.1288139
3881503858650	388150	3858650	0	0.025212672	0.025212672	2.89763E-05	2.89763E-05	3.42329E-07	3.74831E-06	0	0	4.091E-06	4.0906354
3882003858650	388200	3858650	0	0.024942023	0.024942023	2.90758E-05	2.90758E-05	3.38659E-07	3.70813E-06	0	0	4.047E-06	4.0467903
3882503858650	388250	3858650	0	0.024488587	0.024488587	2.92002E-05	2.92002E-05	3.32512E-07	3.64082E-06	0	0	3.973E-06	3.9733271
3883003858650	388300	3858650	0	0.024551169	0.024551169	2.93246E-05	2.93246E-05	3.33362E-07	3.65013E-06	0	0	3.983E-06	3.9834893
3883503858650	388350	3858650	0	0.024176916	0.024176916	2.94738E-05	2.94738E-05	3.28288E-07	3.59457E-06	0	0	3.923E-06	3.9228623
3884003858650	388400	3858650	0	0.024100309	0.024100309	2.95982E-05	2.95982E-05	3.27251E-07	3.58322E-06	0	0	3.91E-06	3.9104677
3884503858650	388450	3858650	0	0.024119866	0.024119866	2.97474E-05	2.97474E-05	3.27518E-07	3.58614E-06	0	0	3.914E-06	3.9136613
3885003858650	388500	3858650	0	0.023906743	0.023906743	2.98469E-05	2.98469E-05	3.24629E-07	3.55451E-06	0	0	3.879E-06	3.8791389
3885503858650	388550	3858650	0	0.02375935	0.02375935	2.99961E-05	2.99961E-05	3.22632E-07	3.53264E-06	0	0	3.855E-06	3.8552767
3886003858650	388600	3858650	0	0.023594594	0.023594594	3.01205E-05	3.01205E-05	3.204E-07	3.5082E-06	0	0	3.829E-06	3.8285967
3886503858650	388650	3858650	0	0.023425737	0.023425737	3.02448E-05	3.02448E-05	3.18111E-07	3.48314E-06	0	0	3.801E-06	3.801252
3887003858650	388700	3858650	0	0.023251346	0.023251346	3.03692E-05	3.03692E-05	3.15748E-07	3.45726E-06	0	0	3.773E-06	3.7730105
3887503858650	388750	3858650	0	0.023079339	0.023079339	3.04936E-05	3.04936E-05	3.13417E-07	3.43174E-06	0	0	3.745E-06	3.7451555
3888003858650	388800	3858650	0	0.022917255	0.022917255	3.06179E-05	3.06179E-05	3.1122E-07	3.40769E-06	0	0	3.719E-06	3.7189084
3888503858650	388850	3858650	0	0.02274439	0.02274439	3.07423E-05	3.07423E-05	3.08878E-07	3.38204E-06	0	0	3.691E-06	3.6909143
3889003858650	388900	3858650	0	0.022591083	0.022591083	3.08666E-05	3.08666E-05	3.068E-07	3.35929E-06	0	0	3.666E-06	3.6660896
3889503858650	388950	3858650	0	0.022422129	0.022422129	3.09661E-05	3.09661E-05	3.0451E-07	3.33422E-06	0	0	3.639E-06	3.6387253
3890003858650	389000	3858650	0	0.022270348	0.022270348	3.10905E-05	3.10905E-05	3.02453E-07	3.31169E-06	0	0	3.614E-06	3.614148
3890503858650	389050	3858650	0	0.022083364	0.022083364	3.12149E-05	3.12149E-05	2.99919E-07	3.28395E-06	0	0	3.584E-06	3.5838657
3891003858650	389100	3858650	0	0.021953525	0.021953525	3.13143E-05	3.13143E-05	2.9816E-07	3.26468E-06	0	0	3.563E-06	3.5628402
3891503858650	389150	3858650	0	0.021793826	0.021793826	3.14138E-05	3.14138E-05	2.95995E-07	3.24098E-06	0	0	3.537E-06	3.5369756
3892003858650	389200	3858650	0	0.02164338	0.02164338	3.15133E-05	3.15133E-05	2.93956E-07	3.21865E-06	0	0	3.513E-06	3.5126107
3892503858650	389250	3858650	0	0.021499994	0.021499994	3.16128E-05	3.16128E-05	2.92013E-07	3.19738E-06	0	0	3.489E-06	3.4893898
3893003858650	389300	3858650	0	0.021349548	0.021349548	3.17123E-05	3.17123E-05	2.89974E-07	3.17505E-06	0	0	3.465E-06	3.4650248
3893503858650	389350	3858650	0	0.021196813	0.021196813	3.18118E-05	3.18118E-05	2.87904E-07	3.15239E-06	0	0	3.44E-06	3.4402888
3894003858650	389400	3858650	0	0.021042647	0.021042647	3.19113E-05	3.19113E-05	2.85814E-07	3.12951E-06	0	0	3.415E-06	3.4153209
3894503858650	389450	3858650	0	0.020809489	0.020809489	3.1961E-05	3.1961E-05	2.82653E-07	3.09489E-06	0	0	3.378E-06	3.3775438
3895003858650	389500	3858650	0	0.0207263	0.0207263	3.20605E-05	3.20605E-05	2.81526E-07	3.08255E-06	0	0	3.364E-06	3.3640784
3895503858650	389550	3858650	0	0.02056288	0.02056288	3.21351E-05	3.21351E-05	2.79311E-07	3.0583E-06	0	0	3.338E-06	3.3376068
3896003858650	389600	3858650	0	0.02006308	0.02006308	3.21849E-05	3.21849E-05	2.72533E-07	2.98408E-06	0	0	3.257E-06	3.2566178
3896503858650	389650	3858650	0	0.020187195	0.020187195	3.22844E-05	3.22844E-05	2.74218E-07	3.00253E-06	0	0	3.277E-06	3.2767479
3897003858650	389700	3858650	0	0.020159625	0.020159625	3.2359E-05	3.2359E-05	2.73845E-07	2.99845E-06	0	0	3.272E-06	3.2722919
3897503858650	389750	3858650	0	0.020030167	0.020030167	3.24336E-05	3.24336E-05	2.7209E-07	2.97923E-06	0	0	3.251E-06	3.2513242
3898003858650	389800	3858650	0	0.019889548	0.019889548	3.24833E-05	3.24833E-05	2.70184E-07	2.95836E-06	0	0	3.229E-06	3.2285436

			Projects	Transmission	Transmission	Telecommunications	Telecommunications	Child Risk					
Unique Identifier	X (UTM)	Y (UTM)	P1	P1	P1	P1	P1	3rd Trimester	0<2	2<16	16<30	Total	per million
3898503858650	389850	3858650	0	0.01973147	0.01973147	3.2558E-05	3.2558E-05	2.68041E-07	2.9349E-06	0	0	3.203E-06	3.2029378
3899003858650	389900	3858650	0	0.019689399	0.019689399	3.26326E-05	3.26326E-05	2.67471E-07	2.92866E-06	0	0	3.196E-06	3.1961319
3899503858650	389950	3858650	0	0.019516439	0.019516439	3.27072E-05	3.27072E-05	2.65127E-07	2.90299E-06	0	0	3.168E-06	3.1681143
3900003858650	390000	3858650	0	0.019457481	0.019457481	3.27818E-05	3.27818E-05	2.64328E-07	2.89424E-06	0	0	3.159E-06	3.1585718
3900503858650	390050	3858650	0	0.019147909	0.019147909	3.28316E-05	3.28316E-05	2.6013E-07	2.84828E-06	0	0	3.108E-06	3.1084108
3901003858650	390100	3858650	0	0.019142662	0.019142662	3.29062E-05	3.29062E-05	2.6006E-07	2.84751E-06	0	0	3.108E-06	3.1075726
3901503858650	390150	3858650	0	0.019118049	0.019118049	3.29559E-05	3.29559E-05	2.59727E-07	2.84386E-06	0	0	3.104E-06	3.1035919
3902003858650	390200	3858650	0	0.01923062	0.01923062	3.30057E-05	3.30057E-05	2.61254E-07	2.86059E-06	0	0	3.122E-06	3.1218432
3902503858650	390250	3858650	0	0.019453379	0.019453379	3.30803E-05	3.30803E-05	2.64276E-07	2.89368E-06	0	0	3.158E-06	3.1579554
3903003858650	390300	3858650	0	0.019608786	0.019608786	3.31549E-05	3.31549E-05	2.66385E-07	2.91677E-06	0	0	3.183E-06	3.1831525
3903503858650	390350	3858650	0	0.01967423	0.01967423	3.32046E-05	3.32046E-05	2.67273E-07	2.92649E-06	0	0	3.194E-06	3.1937664
3904003858650	390400	3858650	0	0.019767627	0.019767627	3.32544E-05	3.32544E-05	2.68541E-07	2.94037E-06	0	0	3.209E-06	3.2089102
3904503858650	390450	3858650	0	0.019822672	0.019822672	3.3329E-05	3.3329E-05	2.69288E-07	2.94855E-06	0	0	3.218E-06	3.2178429
3905003858650	390500	3858650	0	0.019902999	0.019902999	3.33788E-05	3.33788E-05	2.70378E-07	2.96049E-06	0	0	3.231E-06	3.2308687
3905503858650	390550	3858650	0	0.019954229	0.019954229	3.34285E-05	3.34285E-05	2.71074E-07	2.96811E-06	0	0	3.239E-06	3.239179
3906003858650	390600	3858650	0	0.02001061	0.02001061	3.35031E-05	3.35031E-05	2.71839E-07	2.97649E-06	0	0	3.248E-06	3.2483282
3906503858650	390650	3858650	0	0.020013758	0.020013758	3.35777E-05	3.35777E-05	2.71883E-07	2.97697E-06	0	0	3.249E-06	3.2488505
3907003858650	390700	3858650	0	0.020092654	0.020092654	3.35777E-05	3.35777E-05	2.72953E-07	2.98868E-06	0	0	3.262E-06	3.2616362
3907503858650	390750	3858650	0	0.019992961	0.019992961	3.36772E-05	3.36772E-05	2.71602E-07	2.97389E-06	0	0	3.245E-06	3.2454962
3908003858650	390800	3858650	0	0.020149417	0.020149417	3.36524E-05	3.36524E-05	2.73724E-07	2.99712E-06	0	0	3.271E-06	3.2708473
3908503858650	390850	3858650	0	0.020233941	0.020233941	3.36772E-05	3.36772E-05	2.74871E-07	3.00968E-06	0	0	3.285E-06	3.2845492
3909003858650	390900	3858650	0	0.020295474	0.020295474	3.37021E-05	3.37021E-05	2.75705E-07	3.01882E-06	0	0	3.295E-06	3.2945252
3909503858650	390950	3858650	0	0.020041711	0.020041711	3.37021E-05	3.37021E-05	2.72264E-07	2.98114E-06	0	0	3.253E-06	3.2534005
3910003858650	391000	3858650	0	0.020243291	0.020243291	3.3727E-05	3.3727E-05	2.74998E-07	3.01107E-06	0	0	3.286E-06	3.2860724
3910503858650	391050	3858650	0	0.020339549	0.020339549	3.37518E-05	3.37518E-05	2.76304E-07	3.02537E-06	0	0	3.302E-06	3.301676
3911003858650	391100	3858650	0	0.019648377	0.019648377	3.3727E-05	3.3727E-05	2.6693E-07	2.92273E-06	0	0	3.19E-06	3.1896613
3911503858650	391150	3858650	0	0.020429225	0.020429225	3.37767E-05	3.37767E-05	2.7752E-07	3.03869E-06	0	0	3.316E-06	3.3162128
3912003858650	391200	3858650	0	0.020492666	0.020492666	3.37767E-05	3.37767E-05	2.78381E-07	3.04811E-06	0	0	3.326E-06	3.326494
3912503858650	391250	3858650	0	0.020574805	0.020574805	3.37767E-05	3.37767E-05	2.79495E-07	3.06031E-06	0	0	3.34E-06	3.3398054
3913003858650	391300	3858650	0	0.020390302	0.020390302	3.37518E-05	3.37518E-05	2.76992E-07	3.03291E-06	0	0	3.31E-06	3.3099009
3913503858650	391350	3858650	0	0.020282023	0.020282023	3.37518E-05	3.37518E-05	2.75524E-07	3.01683E-06	0	0	3.292E-06	3.2923534
3914003858650	391400	3858650	0	0.020367883	0.020367883	3.3727E-05	3.3727E-05	2.76688E-07	3.02958E-06	0	0	3.306E-06	3.3062637
3914503858650	391450	3858650	0	0.020442963	0.020442963	3.37021E-05	3.37021E-05	2.77706E-07	3.04072E-06	0	0	3.318E-06	3.318427
3915003858650	391500	3858650	0	0.020544087	0.020544087	3.36772E-05	3.36772E-05	2.79077E-07	3.05573E-06	0	0	3.335E-06	3.334811
3915503858650	391550	3858650	0	0.020949727	0.020949727	3.37021E-05	3.37021E-05	2.84578E-07	3.11597E-06	0	0	3.401E-06	3.4005527
3916003858650	391600	3858650	0	0.021011165	0.021011165	3.36772E-05	3.36772E-05	2.85411E-07	3.12509E-06	0	0	3.411E-06	3.4105052
3916503858650	391650	3858650	0	0.021120684	0.021120684	3.36772E-05	3.36772E-05	2.86897E-07	3.14136E-06	0	0	3.428E-06	3.4282537
3917003858650	391700	3858650	0	0.021068309	0.021068309	3.36275E-05	3.36275E-05	2.86186E-07	3.13357E-06	0	0	3.42E-06	3.4197579
3917503858650	391750	3858650	0	0.021179545	0.021179545	3.36275E-05	3.36275E-05	2.87694E-07	3.15009E-06	0	0	3.438E-06	3.4377848
3918003858650	391800	3858650	0	0.0210768	0.0210768	3.35777E-05	3.35777E-05	2.863E-07	3.13483E-06	0	0	3.421E-06	3.4211258
3918503858650	391850	3858650	0	0.021204254	0.021204254	3.35529E-05	3.35529E-05	2.88028E-07	3.15375E-06	0	0	3.442E-06	3.4417769
3919003858650	391900	3858650	0	0.021325794	0.021325794	3.3528E-05	3.3528E-05	2.89676E-07	3.17179E-06	0	0	3.461E-06	3.4614694
3919503858650	391950	3858650	0	0.021404308	0.021404308	3.35031E-05	3.35031E-05	2.90741E-07	3.18345E-06	0	0	3.474E-06	3.4741893
3920003858650	392000	3858650	0	0.021490072	0.021490072	3.34534E-05	3.34534E-05	2.91903E-07	3.19618E-06	0	0	3.488E-06	3.4880802
3920503858650	392050	3858650	0	0.021558092	0.021558092	3.34285E-05	3.34285E-05	2.92825E-07	3.20627E-06	0	0	3.499E-06	3.4990994
3921003858650	392100	3858650	0	0.021593009	0.021593009	3.33788E-05	3.33788E-05	2.93298E-07	3.21145E-06	0	0	3.505E-06	3.5047499
3921503858650	392150	3858650	0	0.021633649	0.021633649	3.3329E-05	3.3329E-05	2.93849E-07	3.21748E-06	0	0	3.511E-06	3.5113279
3922003858650	392200	3858650	0	0.02168049	0.02168049	3.32793E-05	3.32793E-05	2.94483E-07	3.22443E-06	0	0	3.519E-06	3.5189109
3922503858650	392250	3858650	0	0.02179497	0.02179497	3.32295E-05	3.32295E-05	2.96035E-07	3.24142E-06	0	0	3.537E-06	3.5374554
3923003858650	392300	3858650	0	0.021669901	0.021669901	3.31549E-05	3.31549E-05	2.94338E-07	3.22284E-06	0	0	3.517E-06	3.5171747
3923503858650	392350	3858650	0	0.021866711	0.021866711	3.31052E-05	3.31052E-05	2.97007E-07	3.25205E-06	0	0	3.549E-06	3.5490615
3924003858650	392400	3858650	0	0.021774746	0.021774746	3.30554E-05	3.30554E-05	2.95759E-07	3.23839E-06	0	0	3.534E-06	3.5341496
3924503858650	392450	3858650	0	0.021842384	0.021842384	3.29808E-05	3.29808E-05	2.96675E-07	3.24842E-06	0	0	3.545E-06	3.5450989
3925003858650	392500	3858650	0	0.022021736	0.022021736	3.29311E-05	3.29311E-05	2.99107E-07	3.27505E-06	0	0	3.574E-06	3.5741564
3925503858650	392550	3858650	0	0.022052073	0.022052073	3.28564E-05	3.28564E-05	2.99517E-07	3.27954E-06	0	0	3.579E-06	3.5790607
3926003858650	392600	3858650	0	0.022011719	0.022011719	3.28067E-05	3.28067E-05	2.98969E-07	3.27354E-06	0	0	3.573E-06	3.5725129
3926503858650	392650	3858650	0	0.022190689	0.022190689	3.27569E-05	3.27569E-05	3.01396E-07	3.30011E-06	0	0	3.602E-06	3.6015086
3927003858650	392700	3858650	0	0.022051215	0.022051215	3.27072E-05	3.27072E-05	2.99503E-07	3.27939E-06	0	0	3.579E-06	3.5788974
3927503858650	392750	3858650	0	0.02078106	0.02078106	3.26326E-05	3.26326E-05	2.82276E-07	3.09077E-06	0	0	3.373E-06	3.3730454
3928003858650	392800	3858650	0	0.021611421	0.021611421	3.27321E-05	3.27321E-05	2.93539E-07	3.21409E-06	0	0	3.508E-06	3.5076289
3928503858650	392850	3858650	0	0.019443076	0.019443076	3.2558E-05	3.2558E-05	2.6413E-07	2.89207E-06	0	0	3.156E-06	3.156201
3929003858650	392900	3858650	0	0.020023775	0.020023775	3.24087E-05	3.24087E-05	2.72003E-07	2.97828E-06	0	0	3.25E-06	3.2502844
3929503858650	392950	3858650	0	0.020796801	0.020796801	3.25082E-05	3.25082E-05	2.82488E-07	3.09309E-06	0	0	3.376E-06	3.3755762
3930003858650	393000	3858650	0	0.019570817	0.019570817	3.23839E-05	3.23839E-05	2.6586E-07	2.91101E-06	0	0	3.177E-06	3.1768743
3930503858650	393050	3858650	0	0.01986274	0.01986274	3.22844E-05	3.22844E-05	2.69817E-07	2.95435E-06	0	0	3.224E-06	3.224167
3931003858650	393100	3858650	0	0.022024884	0.022024884	3.22595E-05	3.22595E-05	2.9914E-07	3.27542E-06	0	0	3.575E-06	3.5745578
3931503858650	393150	3858650	0	0.022713767	0.022713767	3.216E-05	3.216E-05	3.08482E-07	3.3777E-06	0	0	3.686E-06	3.6861813
3932003858650	393200	3858650	0	0.02293042	0.02293042	3.21103E-05	3.21103E-05	3.11419E-07	3.40986E-06	0	0	3.721E-06	3.7212838
3932503858650	393250	3858650	0	0.023030208	0.023030208	3.20108E-05	3.20108E-05	3.12771E-07	3.42467E-06	0	0	3.737E-06	3.7374393
3933003858650	393300	3858650	0	0.023154324	0.023154324	3.19362E-05	3.19362E-05	3.14453E-07	3.44309E-06	0	0	3.758E-06	3.7575412
3933503858650	393350	3858650	0	0.02319754	0.02319754	3.18864E-05	3.18864E-05	3.15039E-07	3.4495E-06	0	0	3.765E-06	3.7645367
3934003858650	393400	3858650	0	0.023296088	0.023296088	3.18118E-05	3.18118E-05	3.16374E-07	3.46412E-06	0	0	3.78E-06	3.7804952
3934503858650	393450	3858650	0	0.023378323	0.023378323	3.17123E-05	3.17123E-05	3.17488E-07	3.47632E-06	0	0	3.794E-06	3.793806
3935003858650	393500	3858650	0	0.023448442	0.023448442	3.16626E-05	3.16626E-05	3.18439E-07	3.48672E-06	0	0	3.805E-06	3.8051613
3935503858650	393550	3858650	0	0.023474009	0.023474009	3.15631E-05	3.15631E-05	3.18784E-07	3.4905E-06	0	0	3.809E-06	3.8092886
3936003858650	393600	3858650	0	0.023160143	0.023160143	3.14885E-05	3.14885E-05	3.14526E-07	3.44389E-06	0	0	3.758E-06	3.7584117
3936503858650	393650	3858650	0	0.023637238	0.023637238	3.14387E-05	3.14387E-05	3.20996E-07	3.51473E-06	0	0	3.836E-06	3.8357212
3937003858650	393700	3858650	0	0.023697436	0.023697436	3.13641E-05	3.13641E-05	3.21811E-07	3.52365E-06	0	0	3.845E-06	3.8454646
3937503858650	393750	3858650	0	0.023456932	0.023456932	3.12646E-05	3.12646E-05	3.18548E-07	3.48792E-06	0	0	3.806E-06	3.8064728
3938003858650	393800	3858650	0	0.023411236	0.023411236	3.11651E-05	3.11651E-05	3.17927E-07	3.48112E-06	0	0	3.799E-06	3.7990511
3938503858650	393850	3858650	0	0.023780147	0.023780147	3.10905E-05	3.10905E-05	3.22929E-07	3.5359E-06	0	0	3.859E-06	3.8588244
3939003858650	393900	3858650	0	0.023937366	0.023937366	3.0991E-05	3.0991E-05	3.2506E-07	3.55923E-06	0	0	3.884E-06	3.8842871
3939503858650	393950	3858650	0	0.024015213	0.024015213	3.09164E-05	3.09164E-05	3.26115E-07	3.57078E-06	0	0	3.897E-06	3.8968907
3940003858650	394000	3858650	0	0.0240777	0.0240777	3.08169E-05	3.08169E-05	3.26961E-07	3.58004E-06	0	0	3.907E-06	3.9070011
3940503858650	394050	3858650	0	0.024111948	0.024111948	3.07174E-05	3.07174E-05	3.27424E-07	3.58511E-06	0	0	3.913E-06	3.9125353
3941003858650	394100	3858650	0	0.024199716	0.024199716	3.06179E-05	3.06179E-05	3.28613E-07	3.59813E-06	0	0	3.927E-06	3.9267427
3941503858650	394150	3858650	0	0.024249324	0.024249324	3.05184E-05	3.05184E-05	3.29285E-07	3.60548E-06	0	0	3.935E-06	3.934766
3942003858650	394200	3858650	0	0.024368097	0.024368097	3.04189E-05	3.04189E-05	3.30894E-07	3.6231E-06	0	0	3.954E-06	3.9539981
3942503858650	394250	3858650	0	0.024451381	0.024451381	3.03443E-05	3.03443E-05	3.32023E-07	3.63546E-06	0	0	3.967E-06	3.967483
3943003858650	394300	3858650	0	0.024518733	0.024518733	3.02448E-05	3.02448E-05	3.32935E-07	3.64545E-06	0	0	3.978E-06	3.9783819
3943503858650	394350	3858650	0	0.024580362	0.024580362	3.01205E-05	3.01205E-05	3.33769E-07	3.65458E-06	0	0	3.988E-06	3.9883492
3944003858650	394400	3858650	0	0.024648191	0.024648191	2.99961E-05	2.99961E-05	3.34687E-07	3.66463E-06	0	0	3.999E-06	3.9993214
3944503858650	394450	3858650	0	0.024731761	0.024731761	2.98966E-05	2.98966E-05	3.35819E-07	3.67703E-06	0	0	4.013E-06	4.0128486
3945003858650	394500	3858650	0	0.024757806	0.024757806	2.97723E-05	2.97723E-05	3.36171E-07	3.68088E-06	0	0	4.017E-06	4.0170491
3945503858650	394550	3858650	0	0.024850821	0.024850821	2.96728E-05	2.96728E-05	3.37431E-07	3.69468E-06	0	0	4.032E-06	4.0321069
3946003858650	394600	3858650	0	0.024842425	0.024842425	2.95484E-05	2.95484E-05	3.37315E-07	3.69341E-06	0	0	4.031E-06	4.0307262

			Projects	Transmission	Transmission	Telecommunications	Telecommunications	Child Risk					
Unique Identifier	X (UTM)	Y (UTM)	P1	P1	P1	P1	P1	3rd Trimester	0<2	2<16	16<30	Total	per million
3946503858650	394650	3858650	0	0.024840804	0.024840804	2.9424E-05	2.9424E-05	3.37291E-07	3.69315E-06	0	0	4.03E-06	4.0304432
3947003858650	394700	3858650	0	0.024806746	0.024806746	2.92997E-05	2.92997E-05	3.36828E-07	3.68808E-06	0	0	4.025E-06	4.0249037
3947503858650	394750	3858650	0	0.024938493	0.024938493	2.92002E-05	2.92002E-05	3.38613E-07	3.70763E-06	0	0	4.046E-06	4.0462384
3948003858650	394800	3858650	0	0.025171078	0.025171078	2.90758E-05	2.90758E-05	3.41766E-07	3.74214E-06	0	0	4.084E-06	4.0839107
3948503858650	394850	3858650	0	0.025363404	0.025363404	2.89763E-05	2.89763E-05	3.44373E-07	3.77069E-06	0	0	4.115E-06	4.1150628
3949003858650	394900	3858650	0	0.025450886	0.025450886	2.8852E-05	2.8852E-05	3.45558E-07	3.78366E-06	0	0	4.129E-06	4.1292199
3949503858650	394950	3858650	0	0.025327248	0.025327248	2.87276E-05	2.87276E-05	3.43879E-07	3.76528E-06	0	0	4.109E-06	4.109163
3868503858700	386850	3858700	0	0.003279849	0.003279849	2.53947E-05	2.53947E-05	4.48259E-08	4.90818E-07	0	0	5.356E-07	0.5356444
3869003858700	386900	3858700	0	0.008285388	0.008285388	2.55191E-05	2.55191E-05	1.12713E-07	1.23414E-06	0	0	1.347E-06	1.3468569
3869503858700	386950	3858700	0	0.012548142	0.012548142	2.56683E-05	2.56683E-05	1.70527E-07	1.86717E-06	0	0	2.038E-06	2.0376987
3870003858700	387000	3858700	0	0.014363794	0.014363794	2.57927E-05	2.57927E-05	1.95152E-07	2.13681E-06	0	0	2.332E-06	2.3319614
3870503858700	387050	3858700	0	0.015220962	0.015220962	2.59419E-05	2.59419E-05	2.06779E-07	2.26412E-06	0	0	2.471E-06	2.4708974
3871003858700	387100	3858700	0	0.015646159	0.015646159	2.60911E-05	2.60911E-05	2.12548E-07	2.32728E-06	0	0	2.54E-06	2.5398286
3871503858700	387150	3858700	0	0.015881225	0.015881225	2.62155E-05	2.62155E-05	2.15738E-07	2.36221E-06	0	0	2.578E-06	2.5779432
3872003858700	387200	3858700	0	0.016009633	0.016009633	2.63647E-05	2.63647E-05	2.17481E-07	2.3813E-06	0	0	2.599E-06	2.5987771
3872503858700	387250	3858700	0	0.016057333	0.016057333	2.65388E-05	2.65388E-05	2.1813E-07	2.38841E-06	0	0	2.607E-06	2.6065355
3873003858700	387300	3858700	0	0.01610551	0.01610551	2.66632E-05	2.66632E-05	2.18785E-07	2.39558E-06	0	0	2.614E-06	2.6143632
3873503858700	387350	3858700	0	0.016091391	0.016091391	2.68373E-05	2.68373E-05	2.18596E-07	2.39351E-06	0	0	2.612E-06	2.6121033
3874003858700	387400	3858700	0	0.016130791	0.016130791	2.69617E-05	2.69617E-05	2.19132E-07	2.39938E-06	0	0	2.619E-06	2.6185086
3874503858700	387450	3858700	0	0.016115241	0.016115241	2.71109E-05	2.71109E-05	2.18923E-07	2.39709E-06	0	0	2.616E-06	2.6160127
3875003858700	387500	3858700	0	0.016091582	0.016091582	2.72601E-05	2.72601E-05	2.18605E-07	2.3936E-06	0	0	2.612E-06	2.6122027
3875503858700	387550	3858700	0	0.016048842	0.016048842	2.74094E-05	2.74094E-05	2.18027E-07	2.38727E-06	0	0	2.605E-06	2.6053006
3876003858700	387600	3858700	0	0.016013544	0.016013544	2.75586E-05	2.75586E-05	2.1755E-07	2.38205E-06	0	0	2.6E-06	2.5996045
3876503858700	387650	3858700	0	0.015957449	0.015957449	2.77078E-05	2.77078E-05	2.16792E-07	2.37375E-06	0	0	2.591E-06	2.5905379
3877003858700	387700	3858700	0	0.015818929	0.015818929	2.78073E-05	2.78073E-05	2.14914E-07	2.35319E-06	0	0	2.568E-06	2.5681055
3877503858700	387750	3858700	0	0.015840775	0.015840775	2.79566E-05	2.79566E-05	2.15213E-07	2.35646E-06	0	0	2.572E-06	2.5716702
3878003858700	387800	3858700	0	0.015803665	0.015803665	2.81058E-05	2.81058E-05	2.14711E-07	2.35097E-06	0	0	2.566E-06	2.5656802
3878503858700	387850	3858700	0	0.015794029	0.015794029	2.8255E-05	2.8255E-05	2.14583E-07	2.34956E-06	0	0	2.564E-06	2.5641429
3879003858700	387900	3858700	0	0.015721048	0.015721048	2.84043E-05	2.84043E-05	2.13595E-07	2.33874E-06	0	0	2.552E-06	2.5523399
3879503858700	387950	3858700	0	0.015655127	0.015655127	2.85535E-05	2.85535E-05	2.12703E-07	2.32898E-06	0	0	2.542E-06	2.5416809
3880003858700	388000	3858700	0	0.015533397	0.015533397	2.87276E-05	2.87276E-05	2.11054E-07	2.31093E-06	0	0	2.522E-06	2.5219817
3880503858700	388050	3858700	0	0.015442862	0.015442862	2.88769E-05	2.88769E-05	2.09829E-07	2.29751E-06	0	0	2.507E-06	2.5073339
3881003858700	388100	3858700	0	0.015435612	0.015435612	2.90012E-05	2.90012E-05	2.09732E-07	2.29645E-06	0	0	2.506E-06	2.5061791
3881503858700	388150	3858700	0	0.015352232	0.015352232	2.91504E-05	2.91504E-05	2.08603E-07	2.28409E-06	0	0	2.493E-06	2.4926909
3882003858700	388200	3858700	0	0.015350992	0.015350992	2.92499E-05	2.92499E-05	2.08588E-07	2.28392E-06	0	0	2.493E-06	2.492506
3882503858700	388250	3858700	0	0.015301575	0.015301575	2.93743E-05	2.93743E-05	2.07919E-07	2.2766E-06	0	0	2.485E-06	2.4845177
3883003858700	388300	3858700	0	0.015234413	0.015234413	2.95235E-05	2.95235E-05	2.0701E-07	2.26665E-06	0	0	2.474E-06	2.4736577
3883503858700	388350	3858700	0	0.015166775	0.015166775	2.96479E-05	2.96479E-05	2.06095E-07	2.25662E-06	0	0	2.463E-06	2.4627164
3884003858700	388400	3858700	0	0.01510715	0.01510715	2.97723E-05	2.97723E-05	2.05288E-07	2.24779E-06	0	0	2.453E-06	2.4530738
3884503858700	388450	3858700	0	0.015030353	0.015030353	2.99215E-05	2.99215E-05	2.04248E-07	2.2364E-06	0	0	2.441E-06	2.4406524
3885003858700	388500	3858700	0	0.014962428	0.014962428	3.00459E-05	3.00459E-05	2.03329E-07	2.22634E-06	0	0	2.43E-06	2.4296647
3885503858700	388550	3858700	0	0.014898129	0.014898129	3.01951E-05	3.01951E-05	2.02459E-07	2.21681E-06	0	0	2.419E-06	2.4192686
3886003858700	388600	3858700	0	0.014824671	0.014824671	3.03195E-05	3.03195E-05	2.01464E-07	2.20592E-06	0	0	2.407E-06	2.4073842
3886503858700	388650	3858700	0	0.014769816	0.014769816	3.04438E-05	3.04438E-05	2.00722E-07	2.19779E-06	0	0	2.399E-06	2.3985147
3887003858700	388700	3858700	0	0.014713339	0.014713339	3.05682E-05	3.05682E-05	1.99558E-07	2.18942E-06	0	0	2.389E-06	2.3893822
3887503858700	388750	3858700	0	0.014658007	0.014658007	3.06925E-05	3.06925E-05	1.99209E-07	2.18123E-06	0	0	2.38E-06	2.3804354
3888003858700	388800	3858700	0	0.014592563	0.014592563	3.08169E-05	3.08169E-05	1.98323E-07	2.17153E-06	0	0	2.37E-06	2.3698497
3888503858700	388850	3858700	0	0.014518246	0.014518246	3.09413E-05	3.09413E-05	1.97317E-07	2.16051E-06	0	0	2.358E-06	2.3578262
3889003858700	388900	3858700	0	0.014475125	0.014475125	3.10656E-05	3.10656E-05	1.96734E-07	2.15412E-06	0	0	2.351E-06	2.3508582
3889503858700	388950	3858700	0	0.014418458	0.014418458	3.11651E-05	3.11651E-05	1.95967E-07	2.14572E-06	0	0	2.342E-06	2.3416909
3890003858700	389000	3858700	0	0.014347099	0.014347099	3.12895E-05	3.12895E-05	1.95001E-07	2.13515E-06	0	0	2.33E-06	2.3301466
3890503858700	389050	3858700	0	0.014234336	0.014234336	3.14387E-05	3.14387E-05	1.93473E-07	2.11842E-06	0	0	2.312E-06	2.3118966
3891003858700	389100	3858700	0	0.014184633	0.014184633	3.15382E-05	3.15382E-05	1.92801E-07	2.11106E-06	0	0	2.304E-06	2.3038578
3891503858700	389150	3858700	0	0.014154295	0.014154295	3.16377E-05	3.16377E-05	1.9239E-07	2.10657E-06	0	0	2.299E-06	2.2989576
3892003858700	389200	3858700	0	0.01409467	0.01409467	3.17372E-05	3.17372E-05	1.91583E-07	2.09773E-06	0	0	2.289E-06	2.2893109
3892503858700	389250	3858700	0	0.014029226	0.014029226	3.18367E-05	3.18367E-05	1.90697E-07	2.08802E-06	0	0	2.279E-06	2.2787212
3893003858700	389300	3858700	0	0.013954814	0.013954814	3.1961E-05	3.1961E-05	1.89689E-07	2.07699E-06	0	0	2.267E-06	2.2666822
3893503858700	389350	3858700	0	0.013892709	0.013892709	3.20605E-05	3.20605E-05	1.88849E-07	2.06779E-06	0	0	2.257E-06	2.2566336
3894003858700	389400	3858700	0	0.013857792	0.013857792	3.21351E-05	3.21351E-05	1.88376E-07	2.06261E-06	0	0	2.251E-06	2.2509872
3894503858700	389450	3858700	0	0.013786338	0.013786338	3.22346E-05	3.22346E-05	1.87408E-07	2.05202E-06	0	0	2.239E-06	2.2394235
3895003858700	389500	3858700	0	0.013732055	0.013732055	3.23092E-05	3.23092E-05	1.86673E-07	2.04397E-06	0	0	2.231E-06	2.2306386
3895503858700	389550	3858700	0	0.013598305	0.013598305	3.23341E-05	3.23341E-05	1.84859E-07	2.02411E-06	0	0	2.209E-06	2.2089671
3896003858700	389600	3858700	0	0.013610611	0.013610611	3.24585E-05	3.24585E-05	1.85028E-07	2.02595E-06	0	0	2.211E-06	2.2109817
3896503858700	389650	3858700	0	0.013389856	0.013389856	3.24585E-05	3.24585E-05	1.82034E-07	1.99317E-06	0	0	2.175E-06	2.1752063
3897003858700	389700	3858700	0	0.013496513	0.013496513	3.25828E-05	3.25828E-05	1.83482E-07	2.00903E-06	0	0	2.193E-06	2.1925112
3897503858700	389750	3858700	0	0.013434885	0.013434885	3.26575E-05	3.26575E-05	1.82648E-07	1.99989E-06	0	0	2.183E-06	2.1825359
3898003858700	389800	3858700	0	0.013391096	0.013391096	3.27321E-05	3.27321E-05	1.82055E-07	1.9934E-06	0	0	2.175E-06	2.1754516
3898503858700	389850	3858700	0	0.013328227	0.013328227	3.27818E-05	3.27818E-05	1.81203E-07	1.98407E-06	0	0	2.165E-06	2.1652713
3899003858700	389900	3858700	0	0.01327633	0.01327633	3.28564E-05	3.28564E-05	1.805E-07	1.97637E-06	0	0	2.157E-06	2.1568729
3899503858700	389950	3858700	0	0.013251717	0.013251717	3.29311E-05	3.29311E-05	1.80167E-07	1.97273E-06	0	0	2.153E-06	2.1528962
3900003858700	390000	3858700	0	0.01321432	0.01321432	3.30057E-05	3.30057E-05	1.79661E-07	1.96719E-06	0	0	2.147E-06	2.1468478
3900503858700	390050	3858700	0	0.01317864	0.01317864	3.31052E-05	3.31052E-05	1.79178E-07	1.9619E-06	0	0	2.141E-06	2.1410817
3901003858700	390100	3858700	0	0.013117966	0.013117966	3.313E-05	3.313E-05	1.78356E-07	1.9529E-06	0	0	2.131E-06	2.131253
3901503858700	390150	3858700	0	0.013063493	0.013063493	3.31798E-05	3.31798E-05	1.77618E-07	1.94482E-06	0	0	2.122E-06	2.1224331
3902003858700	390200	3858700	0	0.013123213	0.013123213	3.32544E-05	3.32544E-05	1.78429E-07	1.95369E-06	0	0	2.132E-06	2.1321234
3902503858700	390250	3858700	0	0.013191996	0.013191996	3.3329E-05	3.3329E-05	1.79363E-07	1.96392E-06	0	0	2.143E-06	2.1432825
3903003858700	390300	3858700	0	0.013256868	0.013256868	3.33788E-05	3.33788E-05	1.80243E-07	1.97356E-06	0	0	2.154E-06	2.1538036
3903503858700	390350	3858700	0	0.013298653	0.013298653	3.34534E-05	3.34534E-05	1.80811E-07	1.97978E-06	0	0	2.161E-06	2.1605874
3904003858700	390400	3858700	0	0.013342824	0.013342824	3.35031E-05	3.35031E-05	1.81411E-07	1.98634E-06	0	0	2.168E-06	2.1677536
3904503858700	390450	3858700	0	0.013377454	0.013377454	3.35777E-05	3.35777E-05	1.81881E-07	1.9915E-06	0	0	2.173E-06	2.1733778
3905003858700	390500	3858700	0	0.013405692	0.013405692	3.36275E-05	3.36275E-05	1.82265E-07	1.9957E-06	0	0	2.178E-06	2.1779622
3905503858700	390550	3858700	0	0.013433931	0.013433931	3.36772E-05	3.36772E-05	1.82648E-07	1.9999E-06	0	0	2.183E-06	2.1825465
3906003858700	390600	3858700	0	0.01345759	0.01345759	3.37518E-05	3.37518E-05	1.8297E-07	2.00342E-06	0	0	2.186E-06	2.1863928
3906503858700	390650	3858700	0	0.013470469	0.013470469	3.38016E-05	3.38016E-05	1.83146E-07	2.00534E-06	0	0	2.188E-06	2.188488
3907003858700	390700	3858700	0	0.013504336	0.013504336	3.38265E-05	3.38265E-05	1.83605E-07	2.01038E-06	0	0	2.194E-06	2.1939805
3907503858700	390750	3858700	0	0.013523034	0.013523034	3.38762E-05	3.38762E-05	1.8386E-07	2.01316E-06	0	0	2.197E-06	2.1970188
3908003858700	390800	3858700	0	0.013549937	0.013549937	3.39011E-05	3.39011E-05	1.84225E-07	2.01716E-06	0	0	2.201E-06	2.2013827
3908503858700	390850	3858700	0	0.013570639	0.013570639	3.39259E-05	3.39259E-05	1.84506E-07	2.02024E-06	0	0	2.205E-06	2.2047416
3909003858700	390900	3858700	0	0.013592485	0.013592485	3.39508E-05	3.39508E-05	1.84802E-07	2.02348E-06	0	0	2.208E-06	2.2082861
3909503858700	390950	3858700	0	0.013593821	0.013593821	3.40006E-05	3.40006E-05	1.84821E-07	2.02369E-06	0	0	2.209E-06	2.2085106
3910003858700	391000	3858700	0	0.013620151	0.013620151	3.40254E-05	3.40254E-05	1.85179E-07	2.0276E-06	0	0	2.213E-06	2.2127817
3910503858700	391050	3858700	0	0.013660696	0.013660696	3.40254E-05	3.40254E-05	1.85729E-07	2.03362E-06	0	0	2.219E-06	2.2193523
3911003858700	391100	3858700	0	0.013683592	0.013683592	3.40254E-05	3.40254E-05	1.86039E-07	2.03702E-06	0	0	2.223E-06	2.2230628
3911503858700	391150	3858700	0	0.013702672	0.013702672	3.40006E-05	3.40006E-05	1.86298E-07	2.03985E-06	0	0	2.226E-06	2.2261509
3912003858700	391200	3858700	0	0.013737302	0.013737302	3.40254E-05	3.40254E-05	1.86768E-07	2.045E-06	0	0	2.232E-06	2.2317671
3912503858700	391250	3858700	0	0.013731674	0.013731674	3.40254E-05	3.40254E-05	1.86691E-07	2.04416E-06	0	0	2.231E-06	2.2308549

			Projects	Transmission	Transmission	Telecommunications	Telecommunications	Child Risk					
Unique Identifier	X (UTM)	Y (UTM)	P1	P1	P1	P1	P1	3rd Trimester	0<2	2<16	16<30	Total	per million
3913003858700	391300	3858700	0	0.01366518	0.01366518	3.40006E-05	3.40006E-05	1.85789E-07	2.03429E-06	0	0	2.22E-06	2.220075
3913503858700	391350	3858700	0	0.0136461	0.0136461	3.39757E-05	3.39757E-05	1.8553E-07	2.03145E-06	0	0	2.217E-06	2.2169788
3914003858700	391400	3858700	0	0.013706393	0.013706393	3.39757E-05	3.39757E-05	1.86348E-07	2.0404E-06	0	0	2.227E-06	2.2267498
3914503858700	391450	3858700	0	0.013676533	0.013676533	3.39259E-05	3.39259E-05	1.85942E-07	2.03596E-06	0	0	2.222E-06	2.2219026
3915003858700	391500	3858700	0	0.013794828	0.013794828	3.39259E-05	3.39259E-05	1.87546E-07	2.05353E-06	0	0	2.241E-06	2.2410736
3915503858700	391550	3858700	0	0.013876014	0.013876014	3.39259E-05	3.39259E-05	1.88647E-07	2.06558E-06	0	0	2.254E-06	2.2542304
3916003858700	391600	3858700	0	0.013927911	0.013927911	3.39259E-05	3.39259E-05	1.89351E-07	2.07329E-06	0	0	2.263E-06	2.2626408
3916503858700	391650	3858700	0	0.013958821	0.013958821	3.39011E-05	3.39011E-05	1.8977E-07	2.07788E-06	0	0	2.268E-06	2.267646
3917003858700	391700	3858700	0	0.01396941	0.01396941	3.38762E-05	3.38762E-05	1.89913E-07	2.07944E-06	0	0	2.269E-06	2.2693581
3917503858700	391750	3858700	0	0.013998603	0.013998603	3.38513E-05	3.38513E-05	1.90309E-07	2.08378E-06	0	0	2.274E-06	2.2740849
3918003858700	391800	3858700	0	0.014000034	0.014000034	3.38016E-05	3.38016E-05	1.90328E-07	2.08398E-06	0	0	2.274E-06	2.2743088
3918503858700	391850	3858700	0	0.014059563	0.014059563	3.38016E-05	3.38016E-05	1.91135E-07	2.09282E-06	0	0	2.284E-06	2.283956
3919003858700	391900	3858700	0	0.014079979	0.014079979	3.37767E-05	3.37767E-05	1.91412E-07	2.09585E-06	0	0	2.287E-06	2.2872605
3919503858700	391950	3858700	0	0.014096674	0.014096674	3.37518E-05	3.37518E-05	1.91638E-07	2.09832E-06	0	0	2.29E-06	2.2899621
3920003858700	392000	3858700	0	0.014127393	0.014127393	3.37021E-05	3.37021E-05	1.92054E-07	2.10288E-06	0	0	2.295E-06	2.2949323
3920503858700	392050	3858700	0	0.0141542	0.0141542	3.36524E-05	3.36524E-05	1.92416E-07	2.10685E-06	0	0	2.299E-06	2.2992686
3921003858700	392100	3858700	0	0.014175093	0.014175093	3.36026E-05	3.36026E-05	1.92699E-07	2.10995E-06	0	0	2.303E-06	2.3026464
3921503858700	392150	3858700	0	0.014206479	0.014206479	3.35529E-05	3.35529E-05	1.93124E-07	2.1146E-06	0	0	2.308E-06	2.3077248
3922003858700	392200	3858700	0	0.014216687	0.014216687	3.35031E-05	3.35031E-05	1.93262E-07	2.11611E-06	0	0	2.309E-06	2.309371
3922503858700	392250	3858700	0	0.014220694	0.014220694	3.34285E-05	3.34285E-05	1.93315E-07	2.11669E-06	0	0	2.31E-06	2.3100082
3923003858700	392300	3858700	0	0.014198275	0.014198275	3.33788E-05	3.33788E-05	1.9301E-07	2.11336E-06	0	0	2.306E-06	2.306367
3923503858700	392350	3858700	0	0.014185587	0.014185587	3.33041E-05	3.33041E-05	1.92837E-07	2.11146E-06	0	0	2.304E-06	2.3042986
3924003858700	392400	3858700	0	0.014157062	0.014157062	3.32544E-05	3.32544E-05	1.9245E-07	2.10722E-06	0	0	2.3E-06	2.2996679
3924503858700	392450	3858700	0	0.014236148	0.014236148	3.32046E-05	3.32046E-05	1.93522E-07	2.11895E-06	0	0	2.312E-06	2.3124765
3925003858700	392500	3858700	0	0.01432468	0.01432468	3.313E-05	3.313E-05	1.94721E-07	2.13209E-06	0	0	2.327E-06	2.3268117
3925503858700	392550	3858700	0	0.014391078	0.014391078	3.30803E-05	3.30803E-05	1.95621E-07	2.14194E-06	0	0	2.338E-06	2.3375641
3926003858700	392600	3858700	0	0.014414737	0.014414737	3.30305E-05	3.30305E-05	1.95941E-07	2.14545E-06	0	0	2.341E-06	2.3413902
3926503858700	392650	3858700	0	0.014295869	0.014295869	3.29311E-05	3.29311E-05	1.94328E-07	2.12778E-06	0	0	2.322E-06	2.3221104
3927003858700	392700	3858700	0	0.014279746	0.014279746	3.28813E-05	3.28813E-05	1.94109E-07	2.12538E-06	0	0	2.319E-06	2.3194895
3927503858700	392750	3858700	0	0.01419236	0.01419236	3.28564E-05	3.28564E-05	1.92923E-07	2.1124E-06	0	0	2.305E-06	2.3053238
3928003858700	392800	3858700	0	0.014147045	0.014147045	3.28564E-05	3.28564E-05	1.92309E-07	2.10567E-06	0	0	2.298E-06	2.2979801
3928503858700	392850	3858700	0	0.013500043	0.013500043	3.27321E-05	3.27321E-05	1.83532E-07	2.00958E-06	0	0	2.193E-06	2.1931074
3929003858700	392900	3858700	0	0.013269556	0.013269556	3.26326E-05	3.26326E-05	1.80405E-07	1.97533E-06	0	0	2.156E-06	2.1557389
3929503858700	392950	3858700	0	0.013926003	0.013926003	3.27072E-05	3.27072E-05	1.89309E-07	2.07283E-06	0	0	2.262E-06	2.2621341
3930003858700	393000	3858700	0	0.013669855	0.013669855	3.25828E-05	3.25828E-05	1.85833E-07	2.03477E-06	0	0	2.221E-06	2.2206028
3930503858700	393050	3858700	0	0.013738638	0.013738638	3.25082E-05	3.25082E-05	1.86765E-07	2.04497E-06	0	0	2.232E-06	2.2317376
3931003858700	393100	3858700	0	0.014217545	0.014217545	3.24585E-05	3.24585E-05	1.93259E-07	2.11608E-06	0	0	2.309E-06	2.3093408
3931503858700	393150	3858700	0	0.014565851	0.014565851	3.24336E-05	3.24336E-05	1.97983E-07	2.1678E-06	0	0	2.366E-06	2.3657828
3932003858700	393200	3858700	0	0.01464093	0.01464093	3.2359E-05	3.2359E-05	1.99E-07	2.17894E-06	0	0	2.378E-06	2.377938
3932503858700	393250	3858700	0	0.014701509	0.014701509	3.22844E-05	3.22844E-05	1.99821E-07	2.18792E-06	0	0	2.388E-06	2.3877433
3933003858700	393300	3858700	0	0.014749495	0.014749495	3.22098E-05	3.22098E-05	2.0047E-07	2.19504E-06	0	0	2.396E-06	2.3955078
3933503858700	393350	3858700	0	0.014836691	0.014836691	3.21103E-05	3.21103E-05	2.01652E-07	2.20797E-06	0	0	2.41E-06	2.4096225
3934003858700	393400	3858700	0	0.01488897	0.01488897	3.20108E-05	3.20108E-05	2.02359E-07	2.21572E-06	0	0	2.418E-06	2.4180787
3934503858700	393450	3858700	0	0.014937624	0.014937624	3.19362E-05	3.19362E-05	2.03018E-07	2.22293E-06	0	0	2.426E-06	2.4259514
3935003858700	393500	3858700	0	0.014969583	0.014969583	3.18615E-05	3.18615E-05	2.0345E-07	2.22767E-06	0	0	2.431E-06	2.4311185
3935503858700	393550	3858700	0	0.015001542	0.015001542	3.17869E-05	3.17869E-05	2.03883E-07	2.2324E-06	0	0	2.436E-06	2.4362857
3936003858700	393600	3858700	0	0.014970537	0.014970537	3.17372E-05	3.17372E-05	2.03462E-07	2.22779E-06	0	0	2.431E-06	2.431253
3936503858700	393650	3858700	0	0.015041133	0.015041133	3.16377E-05	3.16377E-05	2.04418E-07	2.23826E-06	0	0	2.443E-06	2.4426775
3937003858700	393700	3858700	0	0.0150667	0.0150667	3.15631E-05	3.15631E-05	2.04764E-07	2.24205E-06	0	0	2.447E-06	2.4468088
3937503858700	393750	3858700	0	0.015115545	0.015115545	3.14636E-05	3.14636E-05	2.05425E-07	2.24928E-06	0	0	2.455E-06	2.4547085
3938003858700	393800	3858700	0	0.015118693	0.015118693	3.1389E-05	3.1389E-05	2.05466E-07	2.24974E-06	0	0	2.455E-06	2.4552066
3938503858700	393850	3858700	0	0.015145978	0.015145978	3.12895E-05	3.12895E-05	2.05835E-07	2.25378E-06	0	0	2.46E-06	2.4596121
3939003858700	393900	3858700	0	0.015175647	0.015175647	3.119E-05	3.119E-05	2.06236E-07	2.25817E-06	0	0	2.464E-06	2.4644042
3939503858700	393950	3858700	0	0.015203122	0.015203122	3.11154E-05	3.11154E-05	2.06608E-07	2.26224E-06	0	0	2.469E-06	2.4688447
3940003858700	394000	3858700	0	0.015235272	0.015235272	3.10159E-05	3.10159E-05	2.07042E-07	2.267E-06	0	0	2.474E-06	2.4740387
3940503858700	394050	3858700	0	0.015262938	0.015262938	3.09164E-05	3.09164E-05	2.07416E-07	2.27109E-06	0	0	2.479E-06	2.4785061
3941003858700	394100	3858700	0	0.015288505	0.015288505	3.08169E-05	3.08169E-05	2.07762E-07	2.27487E-06	0	0	2.483E-06	2.4826334
3941503858700	394150	3858700	0	0.015311401	0.015311401	3.07174E-05	3.07174E-05	2.08071E-07	2.27826E-06	0	0	2.486E-06	2.4863278
3942003858700	394200	3858700	0	0.015337541	0.015337541	3.06179E-05	3.06179E-05	2.08424E-07	2.28212E-06	0	0	2.491E-06	2.4905478
3942503858700	394250	3858700	0	0.015366351	0.015366351	3.05184E-05	3.05184E-05	2.08813E-07	2.28639E-06	0	0	2.495E-06	2.4952007
3943003858700	394300	3858700	0	0.015396688	0.015396688	3.04189E-05	3.04189E-05	2.09223E-07	2.29088E-06	0	0	2.5E-06	2.500101
3943503858700	394350	3858700	0	0.015423973	0.015423973	3.03195E-05	3.03195E-05	2.09592E-07	2.29491E-06	0	0	2.505E-06	2.5045065
3944003858700	394400	3858700	0	0.015442194	0.015442194	3.01951E-05	3.01951E-05	2.09837E-07	2.2976E-06	0	0	2.507E-06	2.5074393
3944503858700	394450	3858700	0	0.015482167	0.015482167	3.00956E-05	3.00956E-05	2.10378E-07	2.30352E-06	0	0	2.514E-06	2.5139011
3945003858700	394500	3858700	0	0.015514412	0.015514412	2.99712E-05	2.99712E-05	2.10814E-07	2.30829E-06	0	0	2.519E-06	2.5191066
3945503858700	394550	3858700	0	0.01553416	0.01553416	2.98469E-05	2.98469E-05	2.1108E-07	2.31121E-06	0	0	2.522E-06	2.5222867
3946003858700	394600	3858700	0	0.015547897	0.015547897	2.97225E-05	2.97225E-05	2.11265E-07	2.31323E-06	0	0	2.524E-06	2.5244929
3946503858700	394650	3858700	0	0.015526623	0.015526623	2.95982E-05	2.95982E-05	2.10974E-07	2.31005E-06	0	0	2.521E-06	2.5210251
3947003858700	394700	3858700	0	0.015548851	0.015548851	2.94738E-05	2.94738E-05	2.11274E-07	2.31333E-06	0	0	2.525E-06	2.5246072
3947503858700	394750	3858700	0	0.015528245	0.015528245	2.93494E-05	2.93494E-05	2.10993E-07	2.31025E-06	0	0	2.521E-06	2.5212476
3948003858700	394800	3858700	0	0.015600749	0.015600749	2.92499E-05	2.92499E-05	2.11975E-07	2.32101E-06	0	0	2.533E-06	2.5329814
3948503858700	394850	3858700	0	0.01566772	0.01566772	2.91256E-05	2.91256E-05	2.12882E-07	2.33093E-06	0	0	2.544E-06	2.5438144
3949003858700	394900	3858700	0	0.015716183	0.015716183	2.90012E-05	2.90012E-05	2.13537E-07	2.33811E-06	0	0	2.552E-06	2.5516482
3949503858700	394950	3858700	0	0.015786206	0.015786206	2.89017E-05	2.89017E-05	2.14485E-07	2.34849E-06	0	0	2.563E-06	2.56298
3868503858750	386850	3858750	0	0.002229878	0.002229878	2.5544E-05	2.5544E-05	3.05882E-08	3.34923E-07	0	0	3.655E-07	0.3655113
3869003858750	386900	3858750	0	0.003953563	0.003953563	2.56683E-05	2.56683E-05	5.39666E-08	5.90904E-07	0	0	6.449E-07	0.6448702
3869503858750	386950	3858750	0	0.00634171	0.00634171	2.57927E-05	2.57927E-05	8.63564E-08	9.45554E-07	0	0	1.032E-06	1.0319108
3870003858750	387000	3858750	0	0.00826812	0.00826812	2.59419E-05	2.59419E-05	1.12485E-07	1.23164E-06	0	0	1.344E-06	1.3441271
3870503858750	387050	3858750	0	0.009415114	0.009415114	2.60911E-05	2.60911E-05	1.28042E-07	1.40199E-06	0	0	1.53E-06	1.5300318
3871003858750	387100	3858750	0	0.010063451	0.010063451	2.62404E-05	2.62404E-05	1.36837E-07	1.49829E-06	0	0	1.635E-06	1.635125
3871503858750	387150	3858750	0	0.010452111	0.010452111	2.63647E-05	2.63647E-05	1.4211E-07	1.55602E-06	0	0	1.698E-06	1.6981308
3872003858750	387200	3858750	0	0.010708069	0.010708069	2.6514E-05	2.6514E-05	1.45583E-07	1.59405E-06	0	0	1.74E-06	1.7396353
3872503858750	387250	3858750	0	0.010847353	0.010847353	2.66881E-05	2.66881E-05	1.47474E-07	1.61476E-06	0	0	1.762E-06	1.7622357
3873003858750	387300	3858750	0	0.010974521	0.010974521	2.68124E-05	2.68124E-05	1.49201E-07	1.63366E-06	0	0	1.783E-06	1.7828646
3873503858750	387350	3858750	0	0.011060667	0.011060667	2.69617E-05	2.69617E-05	1.50371E-07	1.64648E-06	0	0	1.797E-06	1.7968495
3874003858750	387400	3858750	0	0.01112468	0.01112468	2.71109E-05	2.71109E-05	1.51241E-07	1.65601E-06	0	0	1.807E-06	1.8072477
3874503858750	387450	3858750	0	0.011176005	0.011176005	2.72601E-05	2.72601E-05	1.51939E-07	1.66365E-06	0	0	1.816E-06	1.8155895
3875003858750	387500	3858750	0	0.011205007	0.011205007	2.74094E-05	2.74094E-05	1.52335E-07	1.66798E-06	0	0	1.82E-06	1.8203137
3875503858750	387550	3858750	0	0.011219985	0.011219985	2.75586E-05	2.75586E-05	1.5254E-07	1.67023E-06	0	0	1.823E-06	1.8227652
3876003858750	387600	3858750	0	0.011213879	0.011213879	2.77078E-05	2.77078E-05	1.52459E-07	1.66934E-06	0	0	1.822E-06	1.8217999
3876503858750	387650	3858750	0	0.011214261	0.011214261	2.78571E-05	2.78571E-05	1.52466E-07	1.66942E-06	0	0	1.822E-06	1.8218859
3877003858750	387700	3858750	0	0.011240686	0.011240686	2.80063E-05	2.80063E-05	1.52827E-07	1.67337E-06	0	0	1.826E-06	1.8261926
3877503858750	387750	3858750	0	0.011249177	0.011249177	2.81307E-05	2.81307E-05	1.52943E-07	1.67465E-06	0	0	1.828E-06	1.8275888
3878003858750	387800	3858750	0	0.011253279	0.011253279	2.82799E-05	2.82799E-05	1.53001E-07	1.67528E-06	0	0	1.828E-06	1.8282777
3878503858750	387850	3858750	0	0.01122714	0.01122714	2.84291E-05	2.84291E-05	1.52649E-07	1.67142E-06	0	0	1.824E-06	1.8240658
3879003858750	387900	3858750	0	0.011197947	0.011197947	2.85784E-05	2.85784E-05	1.52255E-07	1.6671E-06	0	0	1.819E-06	1.8193591

			Projects	Transmission	Transmission	Telecommunications	Telecommunications	Child Risk					
Unique Identifier	X (UTM)	Y (UTM)	P1	P1	P1	P1	P1	3rd Trimester	0<2	2<16	16<30	Total	per million
3879503858750	387950	3858750	0	0.011188789	0.011188789	2.87276E-05	2.87276E-05	1.52133E-07	1.66577E-06	0	0	1.818E-06	1.8178991
3880003858750	388000	3858750	0	0.011148244	0.011148244	2.88769E-05	2.88769E-05	1.51585E-07	1.65977E-06	0	0	1.811E-06	1.8113526
3880503858750	388050	3858750	0	0.011092053	0.011092053	2.9051E-05	2.9051E-05	1.50825E-07	1.65145E-06	0	0	1.802E-06	1.8022746
3881003858750	388100	3858750	0	0.011106363	0.011106363	2.91753E-05	2.91753E-05	1.51021E-07	1.65359E-06	0	0	1.805E-06	1.8046138
3881503858750	388150	3858750	0	0.011068394	0.011068394	2.93246E-05	2.93246E-05	1.50508E-07	1.64798E-06	0	0	1.798E-06	1.7984848
3882003858750	388200	3858750	0	0.011073355	0.011073355	2.94489E-05	2.94489E-05	1.50577E-07	1.64873E-06	0	0	1.799E-06	1.7993088
3882503858750	388250	3858750	0	0.01108757	0.01108757	2.95733E-05	2.95733E-05	1.50771E-07	1.65086E-06	0	0	1.802E-06	1.8016326
3883003858750	388300	3858750	0	0.011064292	0.011064292	2.96976E-05	2.96976E-05	1.50457E-07	1.64742E-06	0	0	1.798E-06	1.7978804
3883503858750	388350	3858750	0	0.011045689	0.011045689	2.9822E-05	2.9822E-05	1.50207E-07	1.64468E-06	0	0	1.795E-06	1.7948858
3884003858750	388400	3858750	0	0.011015543	0.011015543	2.99712E-05	2.99712E-05	1.498E-07	1.64022E-06	0	0	1.79E-06	1.7900245
3884503858750	388450	3858750	0	0.010973948	0.010973948	3.01205E-05	3.01205E-05	1.49238E-07	1.63407E-06	0	0	1.783E-06	1.7833079
3885003858750	388500	3858750	0	0.010946759	0.010946759	3.02448E-05	3.02448E-05	1.48871E-07	1.63005E-06	0	0	1.779E-06	1.7789219
3885503858750	388550	3858750	0	0.010916804	0.010916804	3.03941E-05	3.03941E-05	1.48467E-07	1.62562E-06	0	0	1.774E-06	1.7740915
3886003858750	388600	3858750	0	0.010882269	0.010882269	3.05184E-05	3.05184E-05	1.48E-07	1.62052E-06	0	0	1.769E-06	1.768515
3886503858750	388650	3858750	0	0.010864524	0.010864524	3.06428E-05	3.06428E-05	1.47761E-07	1.6179E-06	0	0	1.766E-06	1.7656595
3887003858750	388700	3858750	0	0.010837526	0.010837526	3.07672E-05	3.07672E-05	1.47396E-07	1.61391E-06	0	0	1.761E-06	1.7613043
3887503858750	388750	3858750	0	0.010812722	0.010812722	3.08915E-05	3.08915E-05	1.47062E-07	1.61024E-06	0	0	1.757E-06	1.7573048
3888003858750	388800	3858750	0	0.010778951	0.010778951	3.10408E-05	3.10408E-05	1.46606E-07	1.60525E-06	0	0	1.752E-06	1.751856
3888503858750	388850	3858750	0	0.010752048	0.010752048	3.11651E-05	3.11651E-05	1.46243E-07	1.60127E-06	0	0	1.748E-06	1.7475163
3889003858750	388900	3858750	0	0.010734781	0.010734781	3.12646E-05	3.12646E-05	1.4601E-07	1.59872E-06	0	0	1.745E-06	1.7447341
3889503858750	388950	3858750	0	0.010707878	0.010707878	3.1389E-05	3.1389E-05	1.45647E-07	1.59475E-06	0	0	1.74E-06	1.7403944
3890003858750	389000	3858750	0	0.010667237	0.010667237	3.15133E-05	3.15133E-05	1.45097E-07	1.58873E-06	0	0	1.734E-06	1.7338284
3890503858750	389050	3858750	0	0.010615912	0.010615912	3.16377E-05	3.16377E-05	1.44403E-07	1.58113E-06	0	0	1.726E-06	1.7255309
3891003858750	389100	3858750	0	0.010564396	0.010564396	3.17621E-05	3.17621E-05	1.43706E-07	1.5735E-06	0	0	1.717E-06	1.7172024
3891503858750	389150	3858750	0	0.01056888	0.01056888	3.18615E-05	3.18615E-05	1.43768E-07	1.57418E-06	0	0	1.718E-06	1.7179452
3892003858750	389200	3858750	0	0.01053549	0.01053549	3.1961E-05	3.1961E-05	1.43316E-07	1.56923E-06	0	0	1.713E-06	1.7125502
3892503858750	389250	3858750	0	0.010499238	0.010499238	3.20854E-05	3.20854E-05	1.42826E-07	1.56387E-06	0	0	1.707E-06	1.7066954
3893003858750	389300	3858750	0	0.01046146	0.01046146	3.21849E-05	3.21849E-05	1.42315E-07	1.55827E-06	0	0	1.701E-06	1.7005892
3893503858750	389350	3858750	0	0.010449821	0.010449821	3.22844E-05	3.22844E-05	1.42159E-07	1.55656E-06	0	0	1.699E-06	1.6987191
3894003858750	389400	3858750	0	0.010441044	0.010441044	3.2359E-05	3.2359E-05	1.42041E-07	1.55527E-06	0	0	1.697E-06	1.6973088
3894503858750	389450	3858750	0	0.010406223	0.010406223	3.24336E-05	3.24336E-05	1.4157E-07	1.55011E-06	0	0	1.692E-06	1.6916779
3895003858750	389500	3858750	0	0.010384949	0.010384949	3.25082E-05	3.25082E-05	1.41282E-07	1.54696E-06	0	0	1.688E-06	1.6882423
3895503858750	389550	3858750	0	0.010349842	0.010349842	3.25828E-05	3.25828E-05	1.40807E-07	1.54176E-06	0	0	1.683E-06	1.682565
3896003858750	389600	3858750	0	0.010305767	0.010305767	3.26575E-05	3.26575E-05	1.4021E-07	1.53522E-06	0	0	1.675E-06	1.6754343
3896503858750	389650	3858750	0	0.010286783	0.010286783	3.27569E-05	3.27569E-05	1.39954E-07	1.53242E-06	0	0	1.672E-06	1.6723738
3897003858750	389700	3858750	0	0.010259212	0.010259212	3.28316E-05	3.28316E-05	1.39581E-07	1.52834E-06	0	0	1.668E-06	1.6679179
3897503858750	389750	3858750	0	0.010233072	0.010233072	3.28813E-05	3.28813E-05	1.39227E-07	1.52446E-06	0	0	1.664E-06	1.6636898
3898003858750	389800	3858750	0	0.010206551	0.010206551	3.29559E-05	3.29559E-05	1.38869E-07	1.52054E-06	0	0	1.659E-06	1.6594039
3898503858750	389850	3858750	0	0.010172589	0.010172589	3.30305E-05	3.30305E-05	1.38409E-07	1.5155E-06	0	0	1.654E-06	1.6539121
3899003858750	389900	3858750	0	0.010139008	0.010139008	3.30803E-05	3.30803E-05	1.37954E-07	1.51052E-06	0	0	1.648E-06	1.6484781
3899503858750	389950	3858750	0	0.01013233	0.01013233	3.31798E-05	3.31798E-05	1.37865E-07	1.50955E-06	0	0	1.647E-06	1.647412
3900003858750	390000	3858750	0	0.010117543	0.010117543	3.32544E-05	3.32544E-05	1.37666E-07	1.50736E-06	0	0	1.645E-06	1.6450277
3900503858750	390050	3858750	0	0.010098177	0.010098177	3.3329E-05	3.3329E-05	1.37404E-07	1.5045E-06	0	0	1.642E-06	1.6419013
3901003858750	390100	3858750	0	0.010073278	0.010073278	3.33788E-05	3.33788E-05	1.37067E-07	1.50081E-06	0	0	1.638E-06	1.6378742
3901503858750	390150	3858750	0	0.010046852	0.010046852	3.34285E-05	3.34285E-05	1.36709E-07	1.49689E-06	0	0	1.634E-06	1.6335997
3902003858750	390200	3858750	0	0.010069271	0.010069271	3.35031E-05	3.35031E-05	1.37014E-07	1.50023E-06	0	0	1.637E-06	1.637245
3902503858750	390250	3858750	0	0.010101325	0.010101325	3.35529E-05	3.35529E-05	1.3745E-07	1.505E-06	0	0	1.642E-06	1.6424478
3903003858750	390300	3858750	0	0.010130899	0.010130899	3.36275E-05	3.36275E-05	1.37852E-07	1.5094E-06	0	0	1.647E-06	1.6472526
3903503858750	390350	3858750	0	0.010159328	0.010159328	3.36772E-05	3.36772E-05	1.38238E-07	1.51363E-06	0	0	1.652E-06	1.6518679
3904003858750	390400	3858750	0	0.010184705	0.010184705	3.37518E-05	3.37518E-05	1.38583E-07	1.51741E-06	0	0	1.656E-06	1.6559924
3904503858750	390450	3858750	0	0.010202163	0.010202163	3.38265E-05	3.38265E-05	1.38821E-07	1.52001E-06	0	0	1.659E-06	1.6588338
3905003858750	390500	3858750	0	0.010220289	0.010220289	3.38762E-05	3.38762E-05	1.39068E-07	1.52271E-06	0	0	1.662E-06	1.6617793
3905503858750	390550	3858750	0	0.010234885	0.010234885	3.39508E-05	3.39508E-05	1.39267E-07	1.52489E-06	0	0	1.664E-06	1.6641569
3906003858750	390600	3858750	0	0.010246428	0.010246428	3.40006E-05	3.40006E-05	1.39424E-07	1.52661E-06	0	0	1.666E-06	1.6660356
3906503858750	390650	3858750	0	0.010259594	0.010259594	3.40503E-05	3.40503E-05	1.39603E-07	1.52857E-06	0	0	1.668E-06	1.6681772
3907003858750	390700	3858750	0	0.010283921	0.010283921	3.40752E-05	3.40752E-05	1.39933E-07	1.53219E-06	0	0	1.672E-06	1.6721237
3907503858750	390750	3858750	0	0.010254919	0.010254919	3.41747E-05	3.41747E-05	1.39541E-07	1.5279E-06	0	0	1.667E-06	1.6674398
3908003858750	390800	3858750	0	0.010316261	0.010316261	3.41498E-05	3.41498E-05	1.40373E-07	1.537E-06	0	0	1.677E-06	1.6773768
3908503858750	390850	3858750	0	0.010331334	0.010331334	3.41747E-05	3.41747E-05	1.40578E-07	1.53925E-06	0	0	1.68E-06	1.6798236
3909003858750	390900	3858750	0	0.010338299	0.010338299	3.42244E-05	3.42244E-05	1.40673E-07	1.54029E-06	0	0	1.681E-06	1.6809603
3909503858750	390950	3858750	0	0.010345454	0.010345454	3.41747E-05	3.41747E-05	1.40769E-07	1.54134E-06	0	0	1.682E-06	1.6821118
3910003858750	391000	3858750	0	0.010357665	0.010357665	3.41995E-05	3.41995E-05	1.40935E-07	1.54316E-06	0	0	1.684E-06	1.6840947
3910503858750	391050	3858750	0	0.010377317	0.010377317	3.42244E-05	3.42244E-05	1.41202E-07	1.54608E-06	0	0	1.687E-06	1.6872836
3911003858750	391100	3858750	0	0.010398591	0.010398591	3.42493E-05	3.42493E-05	1.41491E-07	1.54924E-06	0	0	1.691E-06	1.6907353
3911503858750	391150	3858750	0	0.01041853	0.01041853	3.42493E-05	3.42493E-05	1.41761E-07	1.55221E-06	0	0	1.694E-06	1.6939665
3912003858750	391200	3858750	0	0.010429882	0.010429882	3.42742E-05	3.42742E-05	1.41915E-07	1.55389E-06	0	0	1.696E-06	1.6958103
3912503858750	391250	3858750	0	0.010430741	0.010430741	3.42493E-05	3.42493E-05	1.41927E-07	1.55402E-06	0	0	1.696E-06	1.6959455
3913003858750	391300	3858750	0	0.01040775	0.01040775	3.42244E-05	3.42244E-05	1.41615E-07	1.5506E-06	0	0	1.692E-06	1.6922155
3913503858750	391350	3858750	0	0.010415477	0.010415477	3.42244E-05	3.42244E-05	1.41719E-07	1.55175E-06	0	0	1.693E-06	1.6934678
3914003858750	391400	3858750	0	0.010433794	0.010433794	3.41995E-05	3.41995E-05	1.41968E-07	1.55446E-06	0	0	1.696E-06	1.6964321
3914503858750	391450	3858750	0	0.010444192	0.010444192	3.41747E-05	3.41747E-05	1.42108E-07	1.55601E-06	0	0	1.698E-06	1.6981133
3915003858750	391500	3858750	0	0.010473385	0.010473385	3.41747E-05	3.41747E-05	1.42504E-07	1.56034E-06	0	0	1.703E-06	1.7028442
3915503858750	391550	3858750	0	0.010505535	0.010505535	3.41498E-05	3.41498E-05	1.4294E-07	1.56511E-06	0	0	1.708E-06	1.7080503
3916003858750	391600	3858750	0	0.010538352	0.010538352	3.41498E-05	3.41498E-05	1.43385E-07	1.56998E-06	0	0	1.713E-06	1.7133687
3916503858750	391650	3858750	0	0.010558672	0.010558672	3.41249E-05	3.41249E-05	1.4366E-07	1.573E-06	0	0	1.717E-06	1.7166577
3917003858750	391700	3858750	0	0.010572028	0.010572028	3.41001E-05	3.41001E-05	1.43841E-07	1.57498E-06	0	0	1.719E-06	1.7188181
3917503858750	391750	3858750	0	0.010596165	0.010596165	3.41001E-05	3.41001E-05	1.44168E-07	1.57856E-06	0	0	1.723E-06	1.7227296
3918003858750	391800	3858750	0	0.010611142	0.010611142	3.40752E-05	3.40752E-05	1.44371E-07	1.58078E-06	0	0	1.725E-06	1.7251529
3918503858750	391850	3858750	0	0.010617439	0.010617439	3.40254E-05	3.40254E-05	1.44456E-07	1.58171E-06	0	0	1.726E-06	1.7261652
3919003858750	391900	3858750	0	0.010637377	0.010637377	3.40006E-05	3.40006E-05	1.44726E-07	1.58467E-06	0	0	1.729E-06	1.7293924
3919503858750	391950	3858750	0	0.01064873	0.01064873	3.39508E-05	3.39508E-05	1.44879E-07	1.58635E-06	0	0	1.731E-06	1.7312241
3920003858750	392000	3858750	0	0.010657125	0.010657125	3.39011E-05	3.39011E-05	1.44992E-07	1.58758E-06	0	0	1.733E-06	1.7325766
3920503858750	392050	3858750	0	0.010669813	0.010669813	3.38762E-05	3.38762E-05	1.45164E-07	1.58946E-06	0	0	1.735E-06	1.7346288
3921003858750	392100	3858750	0	0.010683837	0.010683837	3.38265E-05	3.38265E-05	1.45354E-07	1.59154E-06	0	0	1.737E-06	1.7368934
3921503858750	392150	3858750	0	0.010700818	0.010700818	3.37767E-05	3.37767E-05	1.45583E-07	1.59405E-06	0	0	1.74E-06	1.7396373
3922003858750	392200	3858750	0	0.010713125	0.010713125	3.3727E-05	3.3727E-05	1.45749E-07	1.59587E-06	0	0	1.742E-06	1.7416236
3922503858750	392250	3858750	0	0.01072629	0.01072629	3.36772E-05	3.36772E-05	1.45927E-07	1.59782E-06	0	0	1.744E-06	1.7437491
3923003858750	392300	3858750	0	0.010702631	0.010702631	3.36026E-05	3.36026E-05	1.45605E-07	1.5943E-06	0	0	1.74E-06	1.7399028
3923503858750	392350	3858750	0	0.010736689	0.010736689	3.35529E-05	3.35529E-05	1.46067E-07	1.59935E-06	0	0	1.745E-06	1.7454141
3924003858750	392400	3858750	0	0.010762733	0.010762733	3.35031E-05	3.35031E-05	1.46419E-07	1.60321E-06	0	0	1.75E-06	1.7496268
3924503858750	392450	3858750	0	0.010746229	0.010746229	3.34285E-05	3.34285E-05	1.46194E-07	1.60075E-06	0	0	1.747E-06	1.74694
3925003858750	392500	3858750	0	0.010769506	0.010769506	3.33539E-05	3.33539E-05	1.46509E-07	1.60419E-06	0	0	1.751E-06	1.7507003
3925503858750	392550	3858750	0	0.010760729	0.010760729	3.32793E-05	3.32793E-05	1.46389E-07	1.60288E-06	0	0	1.749E-06	1.7492658
3926003858750	392600	3858750	0	0.010758535	0.010758535	3.32295E-05	3.32295E-05	1.46359E-07	1.60254E-06	0	0	1.749E-06	1.7489022
3926503858750	392650	3858750	0	0.010663326	0.010663326	3.313E-05	3.313E-05	1.45066E-07	1.58839E-06	0	0	1.733E-06	1.7334566
3927003858750	392700	3858750	0	0.01077628	0.01077628	3.31052E-05	3.31052E-05	1.46597E-07	1.60516E-06	0	0	1.752E-06	1.7517577

			Projects	Transmission	Transmission	Telecommunications	Telecommunications	Child Risk					
Unique Identifier	X (UTM)	Y (UTM)	P1	P1	P1	P1	P1	3rd Trimester	0<2	2<16	16<30	Total	per million
3927503858750	392750	3858750	0	0.010731251	0.010731251	3.30554E-05	3.30554E-05	1.45986E-07	1.59847E-06	0	0	1.744E-06	1.7444523
3928003858750	392800	3858750	0	0.010672771	0.010672771	3.30305E-05	3.30305E-05	1.45193E-07	1.58978E-06	0	0	1.735E-06	1.734971
3928503858750	392850	3858750	0	0.010555524	0.010555524	3.29559E-05	3.29559E-05	1.43602E-07	1.57236E-06	0	0	1.716E-06	1.7159581
3929003858750	392900	3858750	0	0.010332193	0.010332193	3.28564E-05	3.28564E-05	1.40571E-07	1.53918E-06	0	0	1.68E-06	1.6797491
3929503858750	392950	3858750	0	0.010474148	0.010474148	3.28316E-05	3.28316E-05	1.42496E-07	1.56025E-06	0	0	1.703E-06	1.7027502
3930003858750	393000	3858750	0	0.010577466	0.010577466	3.28067E-05	3.28067E-05	1.43897E-07	1.57559E-06	0	0	1.719E-06	1.7194898
3930503858750	393050	3858750	0	0.010630699	0.010630699	3.27321E-05	3.27321E-05	1.44618E-07	1.58349E-06	0	0	1.728E-06	1.7281046
3931003858750	393100	3858750	0	0.01074661	0.01074661	3.26823E-05	3.26823E-05	1.46189E-07	1.60069E-06	0	0	1.747E-06	1.7468809
3931503858750	393150	3858750	0	0.010890855	0.010890855	3.26575E-05	3.26575E-05	1.48145E-07	1.62211E-06	0	0	1.77E-06	1.7702531
3932003858750	393200	3858750	0	0.010939986	0.010939986	3.25828E-05	3.25828E-05	1.48811E-07	1.62939E-06	0	0	1.778E-06	1.7782031
3932503858750	393250	3858750	0	0.01097309	0.01097309	3.25082E-05	3.25082E-05	1.49259E-07	1.6343E-06	0	0	1.784E-06	1.7835557
3933003858750	393300	3858750	0	0.011001137	0.011001137	3.24087E-05	3.24087E-05	1.49638E-07	1.63845E-06	0	0	1.788E-06	1.788085
3933503858750	393350	3858750	0	0.011041014	0.011041014	3.23341E-05	3.23341E-05	1.50177E-07	1.64436E-06	0	0	1.795E-06	1.7945353
3934003858750	393400	3858750	0	0.01107574	0.01107574	3.22346E-05	3.22346E-05	1.50647E-07	1.6495E-06	0	0	1.8E-06	1.8001468
3934503858750	393450	3858750	0	0.011103597	0.011103597	3.216E-05	3.216E-05	1.51024E-07	1.65363E-06	0	0	1.805E-06	1.8046492
3935003858750	393500	3858750	0	0.011118574	0.011118574	3.20854E-05	3.20854E-05	1.51226E-07	1.65584E-06	0	0	1.807E-06	1.8070643
3935503858750	393550	3858750	0	0.01112821	0.01112821	3.20108E-05	3.20108E-05	1.51356E-07	1.65726E-06	0	0	1.809E-06	1.8086138
3936003858750	393600	3858750	0	0.011105409	0.011105409	3.1961E-05	3.1961E-05	1.51046E-07	1.65387E-06	0	0	1.805E-06	1.8049107
3936503858750	393650	3858750	0	0.011159501	0.011159501	3.18615E-05	3.18615E-05	1.51778E-07	1.66188E-06	0	0	1.814E-06	1.8136606
3937003858750	393700	3858750	0	0.011150629	0.011150629	3.17869E-05	3.17869E-05	1.51657E-07	1.66055E-06	0	0	1.812E-06	1.8122107
3937503858750	393750	3858750	0	0.011207678	0.011207678	3.16874E-05	3.16874E-05	1.52429E-07	1.66901E-06	0	0	1.821E-06	1.8214399
3938003858750	393800	3858750	0	0.011228761	0.011228761	3.15879E-05	3.15879E-05	1.52713E-07	1.67213E-06	0	0	1.825E-06	1.8248405
3938503858750	393850	3858750	0	0.011235153	0.011235153	3.15133E-05	3.15133E-05	1.52799E-07	1.67307E-06	0	0	1.826E-06	1.8258643
3939003858750	393900	3858750	0	0.01124746	0.01124746	3.14138E-05	3.14138E-05	1.52965E-07	1.67488E-06	0	0	1.828E-06	1.8278425
3939503858750	393950	3858750	0	0.011256332	0.011256332	3.13143E-05	3.13143E-05	1.53084E-07	1.67618E-06	0	0	1.829E-06	1.8292642
3940003858750	394000	3858750	0	0.011272073	0.011272073	3.12397E-05	3.12397E-05	1.53296E-07	1.67851E-06	0	0	1.832E-06	1.8318031
3940503858750	394050	3858750	0	0.011287719	0.011287719	3.11402E-05	3.11402E-05	1.53507E-07	1.68082E-06	0	0	1.834E-06	1.8343225
3941003858750	394100	3858750	0	0.011305654	0.011305654	3.10159E-05	3.10159E-05	1.53749E-07	1.68346E-06	0	0	1.837E-06	1.8372089
3941503858750	394150	3858750	0	0.01132273	0.01132273	3.09164E-05	3.09164E-05	1.53979E-07	1.68598E-06	0	0	1.84E-06	1.8399602
3942003858750	394200	3858750	0	0.011335514	0.011335514	3.08169E-05	3.08169E-05	1.54151E-07	1.68786E-06	0	0	1.842E-06	1.8420158
3942503858750	394250	3858750	0	0.011350205	0.011350205	3.07174E-05	3.07174E-05	1.54349E-07	1.69003E-06	0	0	1.844E-06	1.8443805
3943003858750	394300	3858750	0	0.011362035	0.011362035	3.06179E-05	3.06179E-05	1.54508E-07	1.69177E-06	0	0	1.846E-06	1.8462815
3943503858750	394350	3858750	0	0.011382737	0.011382737	3.04936E-05	3.04936E-05	1.54787E-07	1.69483E-06	0	0	1.85E-06	1.8496163
3944003858750	394400	3858750	0	0.011396761	0.011396761	3.03692E-05	3.03692E-05	1.54975E-07	1.69689E-06	0	0	1.852E-06	1.8518688
3944503858750	394450	3858750	0	0.011412979	0.011412979	3.02697E-05	3.02697E-05	1.55194E-07	1.69929E-06	0	0	1.854E-06	1.8544809
3945003858750	394500	3858750	0	0.011430723	0.011430723	3.01453E-05	3.01453E-05	1.55433E-07	1.7019E-06	0	0	1.857E-06	1.8573364
3945503858750	394550	3858750	0	0.011441885	0.011441885	3.0021E-05	3.0021E-05	1.55583E-07	1.70354E-06	0	0	1.859E-06	1.8591251
3946003858750	394600	3858750	0	0.011437687	0.011437687	2.98966E-05	2.98966E-05	1.55524E-07	1.7029E-06	0	0	1.858E-06	1.8584247
3946503858750	394650	3858750	0	0.011441312	0.011441312	2.97723E-05	2.97723E-05	1.55572E-07	1.70342E-06	0	0	1.859E-06	1.8589921
3947003858750	394700	3858750	0	0.011459534	0.011459534	2.96479E-05	2.96479E-05	1.55817E-07	1.70611E-06	0	0	1.862E-06	1.8619248
3947503858750	394750	3858750	0	0.010814249	0.010814249	2.93992E-05	2.93992E-05	1.47062E-07	1.61025E-06	0	0	1.757E-06	1.7573103
3948003858750	394800	3858750	0	0.011534518	0.011534518	2.94489E-05	2.94489E-05	1.56831E-07	1.71721E-06	0	0	1.874E-06	1.8740445
3948503858750	394850	3858750	0	0.011547683	0.011547683	2.93246E-05	2.93246E-05	1.57008E-07	1.71915E-06	0	0	1.876E-06	1.8761579
3949003858750	394900	3858750	0	0.011567336	0.011567336	2.92251E-05	2.92251E-05	1.57273E-07	1.72205E-06	0	0	1.879E-06	1.8793266
3949503858750	394950	3858750	0	0.011590804	0.011590804	2.90758E-05	2.90758E-05	1.57589E-07	1.72552E-06	0	0	1.883E-06	1.8831057

SCE Projects Construction Health Risk Assessment

Maximum Individual Non-Cancer Impact Calculations - Sensitive Receptors (Maximum Impacted Senior Residential Receptor) (IMPACT AT ALL OTHER LOCATIONS ON THE PROJECT SITE WOULD BE LESS THAN SHOWN)

Maximum Non-cancer Chronic Hazards / Toxicological Endpoints*

Receptor Group	Pollutant	CREL[1]	CONC	WFrac	$CONC_{WF}$	HI		ALIM	BN	CVS	DEV	ENDC	EYE	HEM	IMMUN	KIDN	NS	REPRO	RESP	SK
Project:																				
MEI - Max	DPM	5.00E+00	5.52E-02	1.00E+00	0.055152	1.10E-02		-	-	-	-	-	-	-	-	-	-	-	1.10E-02	-
							Total Risk				-			-				-	0.011	
							Threshold				1.00			1.00				1.00	1.00	
							Over?				NO			NO				NO	NO	

Notes:

1. California Air Resources Board, "Consolidated Table of OEHHA/ARB Approved Risk Assessment Health Values," "OEHHA/ARB Approved Chronic Reference Exposure Levels and Target Organs," "OEHHA/ARB Approved Acute Reference Exposure Levels and Target Organs," and "OEHHA/ARB Approved 8-Hour Reference Exposure Levels and Target Organs," http://www.arb.ca.gov/toxics/healthval/healthval.htm. Tables last updated: May 8, 2018. Downloaded: 08/14/18.

Source: ESA, 2020

Where:

$CONC_{WF}$	Pollutant Concentration ($\mu g/m^3$) multiplied by the weight fraction
CREL	Chronic Reference Exposure Level
HI	Hazard Index
MEI	Maximally Exposed Individual
WFrac	Weight fraction of speciated component

* Key to Toxicological Endpoints

ALIM	Alimentary Tract	EYE	Eye	NS	Nervous System
BN	Bone	HEM	Hematologic System	REPRO	Reproductive System
CVS	Cardiovascular System	IMMUN	Immune System	RESP	Respiratory System
DEV	Developmental System	KIDN	Kidney	SK	Skin
ENDC	Endocrine System				

Pacific Steel Group Mojave Micro Mill -- SCE Transmission and Telecommunications Project Construction Analysis

Construction GHG Summary

Emission Source		CO_2e (Metric Tons)[a,b]
Power Transmission Lines		
	2024	1,135.07
	2025	206.69
Telecommunication Line		
	2024	363.65
	2025	60.98
Total Construction Emissions		**1,766**
Amortized Construction Emissions (30 years)		**58.9**

a Totals may not add up exactly due to rounding in the modeling calculations.

b CO_2e emissions are calculated using the GWP values from the IPCC Fourth Assessment Report.

SOURCE: ESA 2023.

Mojave Micro Mill - SCE
Construction Energy Analysis

Annual Fuel Summary

	Heavy-Duty Construction Equipment
175,612	Total Project Consumption
153,713	Annual Consumption
	Haul Trucks
7,434	Total Project Consumption
6,507	Annual Consumption
	Vendor Trucks
-	Total Project Consumption
-	Annual Consumption
	Workers
8,165	Total Project Consumption
7,147	Annual Consumption
7,434	Project Consumption of diesel for Haul Trucks and Vendors
6,507	Annual Consumption
183,046	Total Gallons Diesel
8,165	Total Gallons Gasoline

1.14 Estimated Project Construction Duration (years)

160,220 Annual Average Gallons Diesel
7,147 Annual Average Gallons Gasoline

Kern County			**Percent of Annual Project Compared to Los Angeles County**
Source	**Fuel Type**	**Gallons**	
Workers	Gasoline	406,000,000	0.0018%
Off-Road/Vendor/Haul Trucks	Diesel	272,365,805	0.0588%

Notes:

1 Gasoline and diesel amounts from CEC, 2019. Available: https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting

Annual Electricity Summary

Temporary Construction Trailer		kWh/year
Electric Off-Road Equipment		kWh/year
Water Conveyance for Dust Control	23,438	kWh/year
Total	**23,438**	**kWh/year**

82,048,000 Total SCE, 2021
0.00003% Project percentage of SCE

Source: https://s3.amazonaws.com/cms.ipressroom.com/405/files/202210/2021-eix-sce-annual

Mojave Micro Mil - SCE
Construction Energy Analysis
Off-Road Equipment

Equipment ≤ 100 hp		
pounds diesel fuel/hp-hr (lb/hp-hr):[1]	0.408	lb/hp-hr
diesel density (lb/gal):[1]	7.11	lb/gal
diesel gallons/hp-hr:	0.0574	gal/hp-hr
<100 hp	26,640	hp-hr
Total diesel gallons:	1,529	gal
Equipment > 100 hp		
pounds diesel fuel/hp-hr (lb/hp-hr):[1]	0.367	lb/hp-hr
diesel density (lb/gal):[1]	7.11	lb/gal
diesel gallons/hp-hr:	0.0516	gal/hp-hr
>100 hp	3,372,048	hp-hr
Total diesel gallons:	174,083	gal
Total diesel gallons (off-road equipment):	**175,612**	**gal**

1. OFFROAD2017 Emission Factor Documentation

Site	Construction Phase	Equipment	Number	Hours/Day	HP	Load	Days	Total hp-hr	Electric Equipment	Electric Conversion (kW/HP)	Electric Demand (kWh)
Transmission	Grading/Excavation	Air Compressor	2	8	120	0.48	300	276,480		-	-
Transmission	Grading/Excavation	Aerial Lift	3	8	350	0.41	300	1,033,200		-	-
Transmission	Grading/Excavation	Tractors/Loaders/Backhoes	1	8	200	0.37	300	177,600		-	-
Transmission	Grading/Excavation	Crane	2	8	235	0.29	300	327,120		-	-
Transmission	Grading/Excavation	other construction equipment	1	8	300	0.42	300	302,400		-	-
Transmission	Grading/Excavation	Offhighway Truck	1	8	402	0.38	300	366,624		-	-
Telecommunications	Grading/Excavation	Aerial Lift	1	8	350	0.41	300	344,400		-	-
Telecommunications	Grading/Excavation	Generator Set	1	8	15	0.74	300	26,640		-	-
Telecommunications	Grading/Excavation	Tractors/Loaders/Backhoes	1	8	200	0.37	300	177,600		-	-
Telecommunications	Grading/Excavation	Offhighway Truck	1	8	402	0.38	300	366,624		-	-
							0	-		-	-
							0	-		-	-
							0	-		-	-
							>100 hp	**3,372,048**		**Total Electricity**	**-**
							<100 hp	**26,640**		**Average per Year**	**-**

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Appendix H

Geotechnical Investigation Report

RMA GeoScience
Every Project Matters | www.rmacompanies.com

October 21, 2022 RMA Project Number 21G-0089-0

Pacific Steel Group
860 Sopp Road
Mojave, CA 93501

Attention: Mark Olson, VP of Mill Operations

Subject: Geotechnical Investigation
Micro Mill
Pacific Steel Group
860 Sopp Road
Mojave, CA

Dear Mr. Mark Olson:

As requested, we have completed a geotechnical investigation for the subject site. The results of the investigation are presented in the accompanying report, which includes a description of site conditions, results of our field exploration, field percolation and infiltration testing, laboratory testing, conclusions, and recommendations. This report has been prepared for specific application to this project, in accordance with generally accepted geotechnical engineering practice. It is presented for the sole use of Pacific Steel Group and their representatives and/or associates to help estimate costs associated with development of the project from a geotechnical perspective. This report may not contain sufficient information for other uses.

We appreciate this opportunity to be of service to you. If you have any questions regarding this report, please do not hesitate to contact us at your convenience.

Respectfully submitted,

RMA GeoScience





Haiyan Liu, PE
Project Engineer
C81463

Mark Swiatek, CEG
Principal Geologist
CEG 1781

Distribution: (1) Addressee

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GEOTECHNICAL INVESTIGATION
MICRO MILL
860 SOPP ROAD
MOJAVE, CALIFORNIA

For

Pacific Steel Group
860 Sopp Road
Mojave, CA 93501

October 21, 2022

Project No. 21G-0089-0

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APPENDICES

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Appendix B	Infiltration Testing Results
Appendix C	Laboratory Tests
Appendix D	General Earthwork and Grading Specifications
Appendix E	References

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1.00 INTRODUCTION

1.01 Purpose

The purpose of the investigation was to summarize geotechnical and geologic conditions at the site and to assess their potential impact on the proposed development. The information obtained from our investigation will be used to provide to determine the appropriate foundation and design input to be used for each structure, mill and other support equipment, pavement design, retaining wall and pit wall design, construction shoring design, stormwater runoff, and sanitary septic system design.

1.02 Scope of the Investigation

The general scope of this geotechnical investigation included the following:

- Review of published and unpublished geologic, seismic, groundwater, and geotechnical literature
- Review of site documents provided to us by Pacific Steel Group.
- Examination of aerial photographs and topographic maps
- Review of State of California Alquist-Priolo Earthquake Fault Zone and Seismic Hazard maps
- Contacting of Underground Service Alert (USA) to locate onsite utility lines.
- Logging, sampling, and backfilling of thirty two (32) test pits to maximum depth of 10 feet
- Logging, sampling and backfilling of forty four (44) borings advanced to a maximum depth of 70 feet.
- Perform field infiltration and percolation testing to aid septic system and settlement pond design
- Laboratory testing of representative soil samples
- Geotechnical evaluation of the compiled data
- Preparation of this report presenting our findings, conclusions, and recommendations.

Our scope of work did not include a preliminary site assessment for the potential of hazardous materials onsite.

1.03 Site Location and Description

The subject site is located at the northwest corner of south west corner of Sopp Road and 10th Street West in Mojave, California (Figure 1). The site is bounded at the west by Union Pacific Railroad and extends south approximately 3300 feet from Sopp Road. Most of the site was native desert with majority of surface vegetation being removed. An existing material yard was located at the northwest portion of the site right by Sopp Road.

Its central geographic position is 34.93298 north latitude and -118.14485 west longitude.

1.04 Site History

Based on review of aerial photographs and other information readily available online the site appears to have been vacant, undeveloped desert landscape as far back as the earliest available aerial photograph from 1928.

1.05 Planned Development

Based on the available information, we understand the project will insist the following features.

1. Process Building (including Scrap Handling, Melt Shop, MS Complex, Caster, Rolling Mill, Ladle Maintenance, Mill Stand Maintenance, Service Bay, Test Bay, Spooler, Stock Bay, Rolling Mill Storage Bay, and Fabrication Bay).
   (a) Pre-engineered metal building (PEMB) column foundations for the sizes and reactions noted below:
      (i) Scrap (estimated 108'-9" x 30'-0" bays, 193-kip vertical column loads, 53-kip lateral load).
      (ii) Melt Shop / Caster (estimated 80'-6" x 33'-6" bays, 709-kip vertical column loads, 81-kip lateral load, 14-kip uplift load).
      (iii) Rolling Mill (estimated 88'-8" x 40'-0" bays, 227-kip vertical column loads, 43- kip lateral load).
      (iv) Stock Bay (estimated 100'-0" x 34'-8" bays, 255-kip vertical column loads, 43-kip lateral load).
      (v) Rolling Mill Storage Bay (estimated 127'-0" x 34'-6" bays, 258-kip vertical column loads, 40-kip lateral load).
      (vi) Spooler Bay (estimated 45'-0" x 30'-6" bays, 148-kip vertical column loads, 27-kip lateral load).
      (vii) Fabrication Bay (estimated 120'-0" x 34'-8" bays, 135-kip vertical column loads, 40-kip lateral load).
      (viii) Service Bay (estimated 26'-4" x 30'-6" bays, 16-kip vertical column loads, 27-kip lateral load).
      (ix) Ladle Bay (estimated 68'-6" x 33'-6" bays, 293-kip vertical column loads, 40-kip lateral load, 9-kip uplift load).
      (x) Finished Good Bay (estimated 71-0" x 30'-6" bays, 151-kip vertical column loads, 28-kip lateral load).
   (b) Heavy duty reinforced concrete floor slab.
   (c) Melt Shop Complex three story bearing wall building.
      (i) Strip footing load of 16 klf.
2. Oil Storage Building
   (a) Pre-engineered metal building (PEMB) column foundations (estimated 30-0" x 20-0" bays, 12-kip vertical column loads, 20-kip lateral load).
3. Storeroom and Vehicle Maintenance
   (a) Pre-engineered metal building (PEMB) column foundations (estimated 92-0" x 30-3" bays, 153-kip vertical column loads, 25-kip lateral load).
4. Fume Treatment ductwork support towers, ash silo and load out, baghouse and Fume Treatment plant building.
   (a) Fume Treatment Support Towers (12-0" x 55-0" support spacing, 101-kip vertical column loads, 82-kip lateral load, 85-kip uplift load);
   (b) One Dust Silo (estimated 143-kip vertical loads, 79-kip lateral load, 140-kips uplift load).
   (c) Pre-Engineered Metal Building (PEMB) Column Foundations (estimated 10-0" x 10-0" bays, 3-kip vertical column loads, 5-kip lateral load).
   (d) Baghouse foundations (estimated 40-0" x 30-0" bays, 27-kip vertical column loads, 47-kip lateral load, 13-kip uplift load).
5. Ancillary Buildings including Office, Locker Room, Rail House, Pusher Building, Gate House and Maintenance Facility.
   (a) Ancillary buildings to be typical one-story light industrial or commercial construction and associated loadings. (estimated 10-0" x 10-0" bays, 3-kip vertical column loads, 5-kip lateral load).
6. Outdoor slag disposal, scrap storage and preparation areas.
   (a) Ground surface to be compacted decomposed granite.
7. Pavement
   (a) Employee parking, 246 Spaces of typical traffic loading.
   (b) Plant vehicle parking, 17 spaces of typical traffic loading.

(c) Trailer parking 50 spaces of heavy-duty construction loading in concrete.
(d) Plant roadways of heavy-duty construction loading as follows:
(i) Asphalt or concrete in Scrap Delivery area. Approximately 75 HL-93 trucks per day.
(ii) Asphalt or concrete in Fabrication area. Approximately 40 HL-93 trucks per day.
(iii) Concrete for the Scrap / Slag vehicle parking.
(iv) Embedded rail pavement at the Scrap Bay.

8. Stormwater Detention Pond
9. Truck Scales and Scale House
(a) Scale foundations; (b) Scale House foundations; (c) Traditional steel framed scale house (estimated 10 ft x 10 ft bays, 3-kip vertical column loads, 5-kip lateral load.)
10. Water Treatment Plant
(a) Equipment foundations; (b) Containment / Basin walls; (c) Pipe Supports
11. Utility Components
(a) Gas plant; (b) Storm water detention basin; (c) Septic field; (d) Fire water tank; (e) Site truck refueling area ;(f) Gas regulator; (g) Electrical Substation

1.06 Investigation Methods

Our investigation consisted of office research, field exploration and testing, laboratory testing, review and analysis of the compiled data, and preparation of this report. It has been performed in a manner consistent with generally accepted engineering and geologic principles and practices and has incorporated applicable requirements of California Buildings Code. Definitions of technical terms and symbols used in this report include those of the ASTM International, the California Building Code, and commonly used geologic nomenclature.

Our subsurface investigation consisted of the excavation of thirty two (32) backhoe-dug test pits to maximum depth of 10 feet and the drilling forty four (44) borings to a maximum depth of 70 feet by means of a hollow stem drill rig. Undisturbed and bag samples of the major earth units were collected from the test pits and borings for laboratory inspection and testing. The approximate location of the test pits and borings are shown on Plate 1, Boring and Test Pit Location Map.

Technical supporting data are presented in the attached appendices. Appendix A presents a description of the methods and equipment used in performing the field exploration and logs of our subsurface exploration. Appendix B presents infiltration testing data reduction. Appendix C presents a description of our laboratory testing. General Earthwork and Grading Specifications are presented in Appendix D. References are presented in Appendix E.

2.00 FINDINGS

2.01 Geologic Setting

The subject site is located within the Mojave Desert Geomorphic Province a wedge shaped area bounded by the San Andreas Fault and the San Gabriel and San Bernardino Mountains to the southwest, the Garlock fault and the southern limits of the Tehachapi Mountains, the Sierra Nevada's and Basin and Ranges to the north-northwest. The eastern portion of the province extends into Nevada and Arizona. The province is characterized by an enclosed drainage with many desert plains, playas, and mountain ranges. The site is situated in Antelope Valley the western most region of the Mojave Desert Geomorphic Province. Antelope Valley formed as a down dropped block between the Garlock Fault and the San Andreas Faults and has accumulated Quaternary and

Holocene-aged alluvial sediments of up to 5,000 feet in places. The Antelope Valley has been subdivide into 12 groundwater sub basins essentially based on impermeable pre-Cenozoic igneous and metamorphic rocks along the margins of the Valley and outcroppings within the basin and along fault zones (Ikehara and Phillips, 1994). The subject project is located within the Gloster subbasin, located north of the Rosamond Hills. The Gloster sub basin has approximately 3,000 to 3,500 feet of alluvial sediments (Siade, et al, 2014). Beneath the subject site approximately 130 feet of alluvial deposits have been identified (State of California, 2018).

Dibblee (2008) describes the site soils as Holocene aged Alluvial Deposits consisting of silt, sand and gravel of valley areas and flood plains. We have adopted Dibblee's designation of Qa on our logs to identify the alluvial deposits. The regional geology is shown on Figure 2 – Regional Geologic Map. In addition Wind Blown Deposits (Qs) were noted on site. The recent vegetation stripping of the project site has allowed the site's loose topsoil to be blown away by the regions notable strong winds and the these deposits have accumulated along portions of the ground surface and along the barbed wire fencing placed throughout the property.

No know active faults have been mapped at the subject site location. This site is not located within a Alquist-Priola Fault Zone or a liquefaction hazard zone. The closest zoned fault is the Garlock Fault located approximately 15 miles to the north-northwest (CGS).

2.02 Earth Materials

Wind Blown Deposits (Qs)

As stated above, Holocene Aged Wind Blown Deposits were noted on site as a result of recent vegetation brushing of the subject property. As observed these materials are a few inches in thickness on up to four feet where they accumulated along the barbed wire fences. Vegetation debris caught along the fence lines facilitated the thick accumulation of these deposits. The material consisted of fine to coarse silty sand to sand in a dry and loose condition.

Alluvium (Qal)

Quaternary aged alluvium was encountered in all 32 test pits and 44 borings. It consists of medium to light gray to dark brown, fine to coarse silty sand with gravel. Caliche deposits, principally as nodules at or near the surface, were observed along with iron oxide staining. The alluvium was dry to moist and medium dense to dense. Oxide staining was observed in some areas.

The approximate location of each test pit and boring is shown on the Test Pit Location Map included in this report as Plate 1.

2.03 Expansive Soils

Based on our preliminary observations and laboratory testing, the soils at shallow depths have a very low to low expansion potential. Additional expansion index testing will be required at the completion of rough grading to verify the properties of the near surface soils.

2.04 Surface and Groundwater Conditions

Groundwater was not encountered during our field investigation to the maximum depth explored of 70 feet. There was no surface water encountered at the time of our investigation. Historic groundwater levels have been recorded within the site vicinity as approximately 50 feet below ground surface in the spring of 1978 (Duell, 1987). In 2018 a Well Completion Report for the water well WCR20018-007308 (Latitude: Longitude (34.9369,-11814578) recorded depth to groundwater at 72 feet below ground surface. The current status of this well is not known.

2.05 Faults

The proposed site is not located within an Alquist-Priolo Earthquake Fault Zone, and there are no known active faults on or immediately adjacent to the property. However, there are faults in close enough proximity to the site to cause moderate to intense ground shaking during the lifetime of the proposed development. Additionally, the site has experienced earthquake-induced ground shaking in the past and can be expected to experience further shaking in the future. The closest zoned fault is Garlock Fault located 15 miles to the northwest.

2.06 Landslides

Since the site is relatively flat and located in the floor of the subject site area with no adjacent hillsides, earthquake-induced landsliding does not appear to be a hazard to proposed development.

2.07 Liquefaction

The subject site was not located within a "Zone of Required Investigation for Liquefaction". Based of groundwater depth we conclude that the potential for liquefaction at the site is remote.

2.08 Historic Seismicity

The region of the subject site has experienced shaking from several earthquakes recorded back to 1812. The nearest large historic earthquake occurred on the west end of the Garlock Fault in 1812 with the epicenter located 35 miles west of the site. Historic earthquakes with magnitudes of greater than or equal to 6.0 and have been epicentered within approximately 50 miles of the site, are summarized in the table below.

Large Historic Earthquakes

Event	LAT. NORTH	LONG. WEST	DATE	Quake Mag.	APPROX. DISTANCE mi (km)
Garlock Fault	34.8300	-118.7500	11/27/1852	7.0	35.0 (56.4)
Kern County	35.3670	-118.5800	7/23/1952	6.1	38.8 (62.4)
San Fernando	34.4110	-118.4010	2/9/1971	6.4	39.0 (62.7)
Tejon Pass Region	34.9000	118.9000	10/23/1916	6.0	42.8 (68.9)
Wrightwood	34.3700	-117.6500	12/8/1812	7.0	48.0 (77.3)
Kern County	35.0000	-119.0000	7/21/1952	6.4	48.6 (78.2)
Kern County Earthquake	35.0000	-119.0170	7/21/1952	7.7	49.6 (79.7)

2.09 Double-Ring Infiltration Testing at Settlement Pond

Double-Ring Infiltration testing was conducted in test pit Nos. 16 and 17 using the Double-Ring Infiltrometer method (ASTM Test Method D 3385). Infiltrometer equipment consisted of two graduated plastic cylinders, two steel rings, metal yard-sticks, and plastic tubing to connect the cylinders and steel rings. Millimeter graduations corresponding to water volume were marked directly on clear, rigid plastic tubing attached to the plastic cylinders. Cylinders were connected to special supports to prevent tipping and to maintain proper height. Steel rings were 12 and 24 inches in diameter and 20 inches high. Continual adjustment of the shutoff valves was used to maintain a constant water level in the steel rings. Infiltration rates of water during the test were determined by monitoring volume changes in the calibrated cylinders. Testing was continued until a relatively uniform infiltration rate was obtained, as per ASTM standards. Upon completion of testing, the test pits were backfilled with materials removed from the test excavations.

Test pits were excavated in the area of the proposed settlement pond. The earth materials encountered in the test pits were recorded and classified by our Geologist using the field identification procedure of the Unified Soils Classification System (ASTM D2488). The approximate location of the test locations are shown on Plate 1. The test pit logs are presented in Appendix A.

Testing yielded the following final field infiltration rates have been calculated. However, measured percolation rates should be reduced to determine design infiltration rates that will represent long-term performance of proposed infiltration systems. This is accomplished by applying reduction factors for test method (RF_t), site variability (RF_v) and long-term siltation (RF_s) to the calculated percolation rate.

A total reduction factor (RF) is determined by the following equation:

$$RF = RF_t \times RF_v \times RF_s$$

Where:

RF_t = 2 for bore hole testing

RF_v = Site variability, number of tests, and thoroughness of subsurface investigation (ranging from 1 to 3)

RF_s = Long-term siltation, plugging and maintenance (ranging from 1 to 3)

For determination of design infiltration rates the following reduction factors were selected: RF_t = 2, RF_v = 1, and RF_s = 1. This assumes that subsurface stratigraphy will be uniform at the eventual infiltration location and the pre-treatment of runoff and maintenance measures will be implemented to minimize siltation and plugging of soils.

The following equation to determine a design infiltration rate:

Design Infiltration Rate = Measured Percolation Rate/RF

Summary of Soil Percolation and Infiltration Rates

Location	Measured Infiltration Rate (inch/hour)	Reduction Factor	Design Infiltration Rate (inch/hour)
DIT-1 @ 10 feet	3.9	2	2.0
DIT-2 @ 10 feet	6.5	2	3.3

Infiltration test result sheets are included in Appendix B. We recommend the design infiltration may be 2.0 inch/hour for the infiltration system at the subject project.

Compaction of soil below the proposed infiltration system could significantly lower infiltration rates and could make the tested rate inapplicable. Compaction of soil below the infiltration system could destroy soil structure and thus seriously impact the infiltration system's performance. Proper oversight is needed during construction to ensure that natural soils at the bottom of the infiltration system are not compacted and that the stormwater system excavation does not deviate from the proposed design depth. If the bottom of the stormwater system excavation is deeper than the design depth, the geotechnical engineer should be immediately contacted to provide additional recommendations. Loose fill soil should not be placed above naturally occurring soils at the bottom of the storm water system excavation, as saturation of such soils could result in settlement that might adversely impact the storm water system and overlying improvements.

Additionally, any Kern County, State of California, or other applicable Agency design criteria should be followed.

2.10 Ryon Method Infiltration Testing at Septic Field

At the planned septic field, infiltration testing was performed at two locations, e.g. test pit Nos. 21 and 22 by following "Ryon Method". One 12"x12"x12" percolation test holes were excavated in the bottoms of each test pits. Logs of the test pits are included in Appendix A of this report. Each of the two, one cubic-foot holes were presoaked and water was added as needed to maintain a 12 inch depth for a period of 4 hours per the "Ryon Method". Water was not found in any of the test holes the following day prior to percolation testing began. After the presoaking period each cubic-foot hole was refilled with water until the water reached a depth of 12 inches, and allowed to drain a vertical distance of 6 inches. The time required, in minutes, for the water to drop from the 5th to the 6th inch was recorded for each test hole, as well as the total time required for each hole to completely empty. The percolation test data are included in Appendix B. The percolation rates were 15 minutes for TP-21 and 38 minutes for TP-2 as measured within the 5th and 6th inch water drop.

3.00 CONCLUSIONS AND RECOMMENDATIONS

3.01 General Conclusion

Based on the data collected thus far the project appears feasible from a geotechnical standpoint based upon geotechnical conditions encountered in the test borings and provided our recommendations contained in this report are properly implemented in the design and construction. Our preliminary recommendations provided below are based on the data collected thus far by this office and our understanding of the project and our general experience in engineering geology and geotechnical engineering.

Conventional spread foundations bearing on engineered fill may be used to support the proposed structures. Due to the variations of soil consistency, e.g. blowcounts, across the project site, the proposed foundations will be supported on engineered fill. On-site materials are considered acceptable for use as engineered fill below foundations.

3.02 Seismic Design Parameters

Mapped Spectral Accelerations were obtained by using the online ATC Calculator (ASCE 7-16 Standard) and a site class D was used for the project site based on the soil profiles to 70 feet and the geologic conditions at the site up. Since the mapped risk-targeted maximum considered earthquake (MCE_R) spectral response acceleration parameter at a period of 1 second (S_1) is greater than 0.2, a ground motion hazard analysis is required per ACSE/SEI 7-16 to be performed in accordance with Section 21.2 for structures on Site Class D. However, instead of performing the ground motion hazard analysis, a long period coefficient (F_V) of 1.7 was used for calculation of S_{M1} and S_{D1}. The parameters generated for the subject site are presented in the following table:

2019 California Building Code (CBC) Seismic Parameters

Parameter	Value
Site Location	Latitude = 34. 34.93298 degrees Longitude = -118.14485 degrees
Site Class	Site Class = D
Mapped Spectral Accelerations	S_s (0.2- second period) = 1.018g S_1 (1-second period) = 0.398g
Site Coefficients (Site Class D)	F_a = 1.093 F_v = 1.7
Maximum Considered Earthquake Spectral Accelerations (Site Class D)	S_{MS} (0.2- second period) = 1.112g S_{M1} (1-second period) = 0.677g
Design Earthquake Spectral Accelerations (Site Class D)	S_{DS} (0.2- second period) = 0.742g S_{D1} (1-second period) = 0.451g

For Risk Category II structures with mapped spectral response acceleration parameter at 1-s period (S_1) is less than 0.75, the Seismic Design Category is D (ASCE 7-16 Section 11.6).

Peak earthquake ground acceleration adjusted for site class effects (PGA_M) has been determined in accordance with ASCE 7-16 Section 11.8.3 as follows: $PGA_M = F_{PGA} \times PGA = 1.15 \times 0.45g = 0.518g$.

3.03 Liquefaction and Secondary Earthquake Hazards

Potential secondary seismic hazards that can affect land development projects include liquefaction, tsunamis, seiches, seismically induced settlement, seismically induced flooding and seismically induced landsliding.

Liquefaction

Liquefaction hazard potential for the site is discussed in Section 2.07 of this report.

Tsunamis and Seiches

Tsunamis are sea waves that are generated in response to large-magnitude earthquakes. When these waves reach shorelines, they sometimes produce coastal flooding. Seiches are the oscillation of large bodies of standing water, such as lakes, that can occur in response to ground shaking. Given the location of the site within the Antelope Valley, tsunamis and seiches do not pose hazards due to the inland location of the site and distance of nearby bodies of standing water.

Seismically Induced Settlement

Seismically induced settlement occurs most frequently in areas underlain by loose, granular sediments. Damage as a result of seismically induced settlement is most dramatic when differential settlement occurs in areas with large variations in the thickness of underlying sediments. Settlement caused by ground shaking is often non-uniformly distributed, which can result in differential settlement. Given the in situ density of the alluvium seismically induced settlement of the alluvium is unlikely.

Seismically Induced Flooding

There are no up gradient water reservoirs or dams located in close proximity of the site. Consequently, seismically induced flooding at the site is unlikely.

Seismically Induced Landsliding

According to the California Geological Survey Earthquake Zones of Required Investigation for the Lancaster West Quadrangle (2005) the site does not lie in a landslide hazard zone. Since the site is relatively flat earthquake-induced landsliding does not appear to be a hazard to proposed development.

3.04 Removals and Overexcavation

All vegetation, trash and debris should be cleared from the grading area and removed from the site. Prior to placement of compacted fills, all non-engineered fills and loose, porous, or compressible soils will need to be removed down to competent ground. Removed and/or overexcavated soils may be moisture-conditioned and recompacted as engineered fill, except for soils containing detrimental amounts of organic material. After the removal of deleterious materials, stripping of organic-rich soils, and removal of tree roots, the following removals and over-excavation must be done within the area of the limits of grading:

- Within the proposed buildings and structures areas listed as 1 through 4 in Section 1.05 of this report, removals are recommended so there is a minimum of five (5) feet of compacted fill below the bottom of planned footings and floor slabs.
- Within the proposed buildings and structures areas listed as 5 through 12 in Section 1.05 of this report, removals are recommended so there is a minimum of three (3) feet of compacted fill below the bottom of planned footings.
- Within the area of planned pavement areas, removals are recommended to a minimum depth of 3 feet below existing grade or planned subgrade, whichever is greater.

Following the over-excavation indicated above, a designated representative for the Project Geotechnical Engineer must review the exposed ground surface and determine if any additional over-excavation is required. The over-excavated ground surface in all areas determined to be satisfactory for the support of fills must be scarified to a minimum depth of 6 inches. Scarification should continue until the soils are broken down and free from lumps or clods and until the scarified zone is uniform. The moisture content of the scarified zone shall be adjusted to within 2% of the optimum moisture content. The scarified zone must then be uniformly compacted to at least 90% relative compaction.

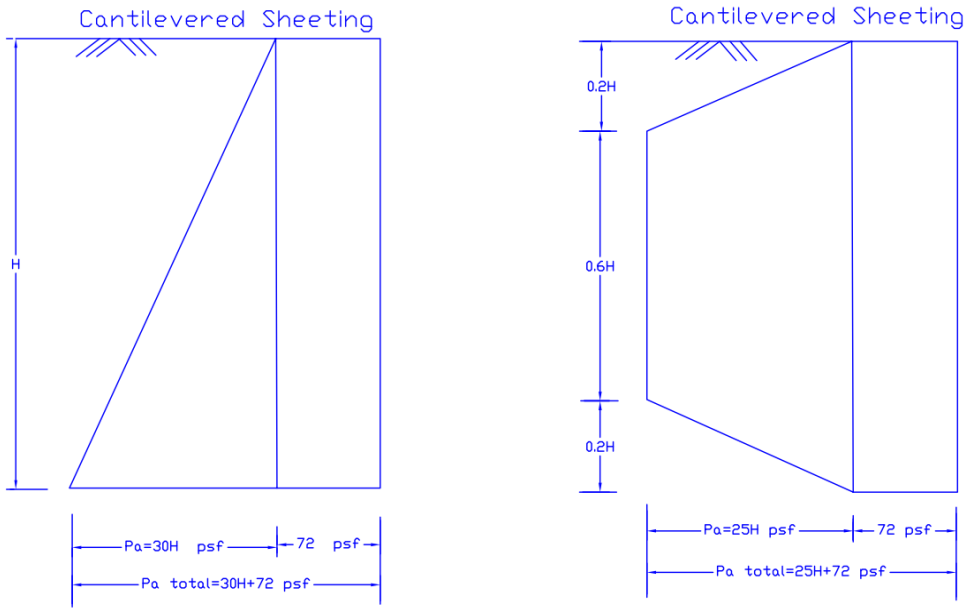
We recommend the slopes of the proposed settlement pond may be 2:1 (horizontal:vertical) or flatter. The slopes should be designed and protected properly by professionals.

3.05 Temporary Excavations

Temporary excavations within the limits of grading may be cut vertically to a maximum height of 5 feet. Cuts above 5 feet may be laid back at a gradient of 1:1. If vertical sidewalls are required in excavations greater than 5 feet in depth, the use of cantilevered or braced shoring is recommended. Excavations less than 5 feet in depth may be constructed with vertical sidewalls without shoring or shielding. Our recommendations for lateral earth pressures to be used in the design of cantilevered and/or braced shoring are presented as follows. These values incorporate a uniform lateral pressure of 72 psf to provide for the normal construction loads imposed by vehicles, equipment, materials, and workmen on the surface adjacent to the trench excavation. However, if vehicles, equipment, materials, etc. are kept a minimum distance equal to the height of the excavation away from the edge of the excavation, this surcharge load need not be applied.

Vehicles, equipment, materials, etc. should be set back away from the edge of temporary excavations a minimum distance of 15 feet from the top edge of the excavation. Surface waters should be diverted away from temporary excavations and prevented from draining over the top of the excavation and down the slope face. During periods of heavy rain, the slope face should be protected with sandbags to prevent drainage over the edge of the slope, and a visqueen liner placed on the slope face to prevent erosion of the slope face.

Periodic observations of the excavations should be made by the geotechnical consultant to verify that the soil conditions have not varied from those anticipated and to monitor the overall condition of the temporary excavations over time. If at any time during construction conditions are encountered which differ from those anticipated, the geotechnical consultant should be contacted and allowed to analyze the field conditions prior to commencing work within the excavation. All Cal/OSHA construction safety orders should be observed during all underground work.



Lateral Shoring Pressures

3.06 General Earthwork and Grading

All grading should be performed in accordance with the General Earthwork and Grading Specifications outlined in Appendix D, unless specifically revised or amended below. Recommendations contained in Appendix D are general specifications for typical grading projects and may not be entirely applicable to this project.

It is also recommended that all earthwork and grading be performed in accordance with the requirements of the lead agency.

3.07 Earthwork Shrinkage and Subsidence

The site is not located within a zone of land subsidence according to the United States Geological Survey California Water Science Center website. It is our opinion that the potential for land subsidence due to over pumping of groundwater or oil extraction is low.

Shrinkage is the decrease in volume of soil upon removal and recompaction expressed as a percentage of the original in-place volume. Subsidence occurs as natural ground is densified to receive fill. These factors account for changes in earth volumes that will occur during grading. Our estimates are consistent with those of Bruin GSI and are as follows:

- Shrinkage factor = 5% to 15% for soil removed and replaced as compacted fill.
- Subsidence factor = 0.1 foot.

The degree to which fill soils are compacted and variations in the in-situ density of existing soils will influence earth volume changes. Consequently, some adjustments in grades near the completion of grading could be required to balance the earthwork.

3.08 Import soil

Imported fill materials that will be placed within building, pavement, or concrete flatwork areas must be non-hazardous and be obtained from a single, uniform source that meets the following criteria:

Maximum Particle Size:	3 inches
Percent Passing 3/4-inch Sieve:	90% - 100%
Percent Passing #4 Sieve:	60% - 100%
Percent Passing #200 Sieve:	15% - 20%
Maximum Expansion Index:	less than 20

3.09 Conventional Foundations

The proposed buildings and structures may be supported by conventional foundation placed on overexcavated and recompacted fill. If the recommendations in the section on grading are followed and footings are established in compacted fill materials, footings may be designed using the following allowable soil bearing values:

- Continuous Wall Footings:

  Footings having a minimum width of 18 inches and a minimum depth of 18 inches below the lowest adjacent grade have allowable bearing capacity of 2,500 pounds per square foot (psf). This value may be increased by 500 psf for each additional 12 inches of embedment depth (relative to the minimum embedment depth) to a maximum value of 4,000 psf.

- Isolated Spread Footings:

  Footings having a minimum width of 24 inches and a minimum depth of 18 inches below the lowest adjacent grade have allowable bearing capacity of 2,500 psf. This value may be increased by 500 psf for each additional 12 inches of embedment depth (relative to the minimum embedment depth) to a maximum value of 5,000 psf.

The above bearing pressures represent an allowable net increase in soil pressure over existing soil pressure and may be increased by one-third for short-term wind or seismic loads. The maximum expected settlement of footings designed with the recommended allowable bearing pressure is expected to be on the order of 1 inch with differential settlement on the order of ½ inch in a 30 feet span.

For the proposed building structure, a nominal reinforcement consisting of one #4 bar placed within 3 inches of the top of footings and another #4 placed within 3 inches of the bottom of footings is recommended. The structural engineer may require heavier reinforcement.

All footing excavations should be observed by the geotechnical consultant to verify that they have been excavated into competent soils. The foundation excavations should be observed prior to the placement of forms, reinforcement steel, or concrete. These excavations should be evenly trimmed and level. Prior to concrete placement, any loose or soft soils should be removed. Excavated soils should not be placed in slab or footing areas unless properly compacted.

Footings may experience an overall loss in bearing capacity or an increased potential to settle where located in close proximity to existing or future utility trenches. Furthermore, stresses imposed by the footings on the utility lines may cause cracking, collapse and/or a loss of serviceability. To reduce this risk, footings should extend below a 1:1 plane projected upward from the closest bottom corner of the trench.

3.10 Pile Foundation System

The propose building structures and solar panels may be supported by pile foundation systems. The pile design skin friction values are presented in the following table with a maximum depth of 70 feet below the lowest ground elevation. No end bearing is recommended. The uplift capacity of piles due to skin friction can be considered one half on the upward capacities.

The recommended group reduction factor in the downward capacities of the shafts due to group action for a spacing of 2 diameters on center is 0.67. There is no reduction if the shafts are spaced 3 diameters on center or farther. The reduction factor for spacing between 2 and 3 diameters can be obtained by linear interpolation.

Depth below Lowest Adjacent Grade, ft	Allowable Skin Friction*, psf
0	0
5	104
10	244
15	385
20	552
25	698
30	868
35	1019
40	1171
50	1399
60	1702
70	2006

* *The values can be linearized between depths.*

The piles and structural grade beams should be designed by a structural engineer that has experience with these types of improvements. The anticipated settlement of the pile foundations, if designed as recommended and properly constructed, should be negligible. Maximum differential settlement between adjacent columns supported by deep foundations should be negligible.

When designing piles, the allowable passive earth may be computed as an equivalent fluid having a density of 400 pounds per square foot per foot to a maximum passive earth pressure of 8,000 pounds per square foot. When designing piles, the allowable passive earth pressure may be increase by 100 percent for piles that are considered isolated. Piles with spacing greater than three times of pile diameter can be considered as isolated piles. To develop the full lateral value, provisions should be implemented to assure firm contact between the soldier piles and undisturbed bedrock.

The anticipated settlement of the pile foundations, if designed as recommended and properly constructed, should be negligible. Maximum differential settlement between adjacent columns supported by deep foundations should be negligible.

Pile excavations should not be allowed to stand open overnight; excavations should be poured as soon as possible after inspection. If unfavorable ground conditions are encountered, piles spaced edge to edge within 10 feet, should be drilled and filled alternately allowing the concrete to set at least 8 hours before drilling an adjacent hole. Pile excavations should not be allowed to stand open overnight; excavations should be poured as soon as possible after inspection.

3.11 Slab-On-Grade

Concrete floor slabs on grade with a minimum thickness of 4 inches are recommended for slabs on grade for the proposed structures for normal floor loading conditions. Reinforcement may be specified by the structural engineer. At a minimum, building slabs should be reinforced with a minimum of #3 bars at 24-inch centers each way. However, if heavy concentrated or moving loads are anticipated, slabs should be designed using a modulus of subgrade reaction (k) of 200 psi/in when soils are prepared in conformance with the grading recommendations

contained within the report. The modulus was obtained based on prepared subgrade comprised of engineered fill beneath floor slabs, and estimates obtained from NAVFAC 7.1 design charts). This value is for a small loaded area (1 sq. ft or less) such as for forklift wheel loads or point loads and should be adjusted for larger loaded areas. The modulus of subgrade reaction shall be calculated as follows:

$$K = K_1 \left(\frac{B+1}{2B}\right)^2$$

Where k_1 = 200 pci, coefficient of subgrade reaction of foundations measuring 1 ft by 1 ft.

B = foundation width in ft.

Contraction joints should be made in accordance with American Concrete Institute (ACI) guidelines.

A moisture vapor retarder/barrier is recommended beneath all slabs-on-grade that will be covered by moisture-sensitive flooring materials such as vinyl, linoleum, wood, carpet, rubber, rubber-backed carpet, tile, impermeable floor coatings, adhesives, or where moisture-sensitive equipment, products, or environments will exist. We recommend that design and construction of the vapor retarder or barrier conform to Section 1805 of the 2019 California Building Code (CBC) and pertinent sections of American Concrete Institute (ACI) guidance documents 302.1R-04, 302.2R-06 and 360R-10.

The moisture vapor retarder/barrier should consist of a minimum 10 mils thick polyethylene with a maximum perm rating of 0.3 in accordance with ASTM E 1745. Seams in the moisture vapor retarder/barrier should be overlapped no less than 6 inches or in accordance with the manufacturer's recommendations. Joints and penetrations should be sealed with the manufacturer's recommended adhesives, pressure-sensitive tape, or both. The contractor must avoid damaging or puncturing the vapor retarder/barrier and repair any punctures with additional polyethylene properly lapped and sealed.
ACI guidelines allow for the placement of moisture vapor retarder/barriers either directly beneath floor slabs or below an intermediate granular soil layer.

Placing the moisture retarder/barrier directly beneath the floor slab will provide improved curing of the slab bottom and will eliminate potential problems caused by water being trapped in a granular fill layer. Concrete slabs poured directly on a vapor retarder/barrier can experience shrinkage cracking and curling due to differential rates of curing through the thickness of the slab. Therefore, for concrete placed directly on the vapor retarded, we recommend a maximum water cement ratio of 0.45 and the use of water-reducing admixtures to increase workability and decrease bleeding.

If granular soil is placed above and below the vapor retarder/barrier, we recommend that the layer be at least 2 inches thick in accordance with traditional practice in southern California. Granular fill should consist of clean fine graded materials with 10 to 30% passing the No. 100 sieve and free from clay or silt. The granular layer should be uniformly compacted and trimmed to provide the full design thickness of the proposed slab. The granular fill layer should not be left exposed to rain or other sources of water such as wet-grinding, power washing, pipe leaks or other processes, and should be dry at the time of concrete placement. Granular fill layers that become saturated should be removed and replaced prior to concrete placement.

3.12 Miscellaneous Concrete Flatwork

Miscellaneous concrete flatwork and walkways may be designed with a minimum thickness of 4 inches. Control joints should be constructed to create squares or rectangles with a maximum spacing of 15 feet. Outdoor flatwork should be reinforced with a minimum of #3 steel bars on 24-inch centers each way.

Walkways should be separated from foundations with a thick expansion joint filler. Control joints should be constructed into non-reinforced walkways at a maximum of 5 feet spacing.

The subgrade soils beneath all miscellaneous concrete flatwork should be compacted to a minimum of 95 percent relative compaction for a minimum depth of 12 inches. The geotechnical engineer should monitor the compaction of the subgrade soils and perform testing to verify that proper compaction has been obtained.

3.13 Footing Excavation and Slab Preparation

All footing excavations should be observed by the geotechnical consultant to verify that they have been excavated into competent soils. The foundation excavations should be observed prior to the placement of forms, reinforcement steel, or concrete. These excavations should be evenly trimmed and level. Prior to concrete placement, any loose or soft soils should be removed. Excavated soils should not be placed on slab or footing areas unless properly compacted.

Prior to the placement of the moisture barrier and sand, the subgrade soils underlying the slab should be observed by the geotechnical consultant to verify that all under-slab utility trenches have been properly backfilled and compacted, that no loose or soft soils are present, and that the slab subgrade has been properly compacted to a minimum of 95 percent relative compaction within the upper 12 inches.

Footings may experience and overall loss in bearing capacity or an increased potential to settle where located in close proximity to existing or future utility trenches. Furthermore, stresses imposed by the footings on the utility lines may cause cracking, collapse and/or a loss of serviceability. To reduce this risk, footings should extend below a 1:1 plane projected upward from the closest bottom of the trench.

Subgrade soils beneath slabs on grade and walkways moist prior to the placement of concrete. The geotechnical consultant should verify that the appropriate moisture content has been achieved a maximum of 24 hours prior to the placement of concrete or moisture barriers.

3.14 Lateral Load Resistance

Lateral loads may be resisted by soil friction and the passive resistance of the soil. The following parameters are recommended.

- Allowable Passive Earth Pressure = 350 pcf (equivalent fluid weight).

  We recommend neglecting passive soil resistance from the upper foot of soil unless protected by a concrete slab or pavement.
- Allowable Coefficient of Friction (soil to footing) = 0.30
- Retaining structures should be designed to resist the following lateral active earth pressures:

Surface Slope of Retained Materials (Horizontal: Vertical)	Equivalent Fluid Weight (pcf)
Level	37
2:1	53

These active earth pressures are only applicable if the retained earth is allowed to strain sufficiently to achieve the active state. The required minimum horizontal strain to achieve the active state is approximately 0.0025H. Retaining structures should be designed to resist an at-rest lateral earth pressure if this horizontal strain cannot be achieved.

- At-rest Lateral Earth Pressure = 57 pcf (equivalent fluid weight)

The lateral earth pressure due to earthquake motions for the retaining walls are calculated by using PGA=S_{DS}/2.5=0.297g and γ=130 pcf for retaining wall dynamic load increment calculations. The point of application may vary between 0.37H to 0.40H.

- Basement (restrained) walls with level backfill:
  $P_{ae} = \frac{1}{2}\gamma H^2(0.68\ PGA/g) = 13.1H^2$
- Cantilever (unrestrained) walls with level backfill:
  $P_{ae} = \frac{1}{2}\gamma H^2(0.42\ PGA/g) = 8.1H^2$
- Cantilever (unrestrained) walls with no steeper than 2:1 slope:
  $P_{ae} = \frac{1}{2}\gamma H^2(0.70\ PGA/g) = 13.5H^2$

3.15 Cement Type and Corrosion Potential

Chemical analyses have been performed on soil samples collected from representative lots. Based on laboratory testing results, soluble sulfate tests indicate the on-site soils have water-soluble sulfate (SO_4) in soil between 0.00% and 0.41% by weight. These results indicate that concrete at the subject site will have a negligible to severe exposure to water-soluble sulfate in the soil. Since the results of 0.41% was only for a soil sample from the parking lot at the northern portion of the subject, RMA GeoScience recommends generally utilizing Type II cement for the referenced project. Our recommendations for concrete exposed to sulfate-containing soils are presented in the table below for preliminary purposes. Additional chemical analyses should be proposed after rough grading.

RECOMMENDATIONS FOR CONCRETE EXPOSED TO SULFATE CONTAINING SOILS

Sulfate Exposure	Water Soluble Sulfate (SO_4) in Soil (% by Weight)	Sulfate (SO_4) in Water (ppm)	Cement Type (ASTM C150)	Maximum Water-Cement Ratio (by Weight)	Minimum Compressive Strength (psi)
Negligible	0.00 - 0.10	0-150	--	--	2,500
Moderate	0.10 - 0.20	150-1,500	II	0.50	4,000
Severe	0.20 - 2.00	1,500-10,000	V	0.45	4,500
Very Severe	Over 2.00	Over 10,000	V plus pozzolan or slag	0.45	4,500

Use of Type V concrete or combinations of cementitious materials formulated to provide sulfate resistance may be permitted if the combinations meet design recommendations contained in American Concrete Institute guideline ACI 318-11.

The soils were also tested for soil reactivity (pH) and electrical resistivity (ohm-cm). The test results indicate that the on-site soils have soil reactivity of 6.9 to 7.6 and electrical resistivity of less than 500 to 9,100 ohm-cm. A neutral or non-corrosive soil has a value ranging from 5.5 to 8.4. Generally, soils that could be considered moderately corrosive to ferrous metals have resistivity values of about 3,000 ohm-cm to 10,000 ohm-cm. Soils with resistivity values less than 3,000 ohm-cm can be considered corrosive and soils with resistivity values less than 1,000 ohm-cm can be considered extremely corrosive.

Based on our analysis, it appears that the underlying onsite soils are extremely corrosive to ferrous metals. Protection of buried pipes utilizing coatings on all underground pipes; clean backfills and a cathodic protection system can be effective in controlling corrosion. A qualified corrosion engineer should be consulted to further assess the corrosive properties of the soil.

3.16 Preliminary Pavement Sections

Asphalt Concrete (AC) pavement thickness sections and Portland Cement Concrete (PCC) pavement sections were determined considering on-site soils and the results of our R-value testing. Additional R-value testing should be completed prior to pavement construction to verify the design R-value. Based on an R-value of 22, we would recommend the following preliminary structural sections assuming the pavement subgrades will be prepared as recommended within this report:

ASPHALT SECTIONS

TRAFFIC INDEX	ASPHALT THICKNESS, IN.	BASE THICKNESS, IN.
5.0	3.0	7.0
6.0	4.0	8.0
8.0	5.0	13.0
10.0	6.0	18.0

PORTLAND CEMENT CONCRETE (PCC) SECTIONS

TRAFFIC TYPE	PCC THICKNESS, IN.	BASE THICKNESS, IN.
Automobile & Pickup Trucks	5.0	6.0
Truck Traffic (Light Volume)	6.0	8.0
Heavy-Duty Construction Loading	10.0	12.0

At a minimum, the upper 12 inches of subgrade soils should be at or above optimum moisture content and compacted to a minimum of 95% relative compaction prior to placement of base. All aggregate base courses should also be at or no more than 2% over optimum moisture and compacted to a minimum of 95% relative compaction.

These pavement sections are considered minimal sections based upon the expected traffic and the existing subgrade conditions. However, they are expected to function with periodic maintenance and overlays if good drainage is provided and maintained.

All concrete for rigid pavements should have a minimum flexural strength of 600 psi, and be placed with a maximum slump of four inches. Proper joint spacing will also be required to prevent excessive slab curling and

shrinkage cracking. All joints should be sealed to prevent entry of foreign material and dowelled where necessary for load transfer.

Preventative maintenance should be planned and provided for through an on-going pavement management program in order to enhance future pavement performance. Preventative maintenance activities are intended to slow the rate of pavement deterioration, and to preserve the pavement investment.

Preventative maintenance consists of both localized maintenance (e.g. crack sealing and patching) and global maintenance (e.g. surface sealing). Preventative maintenance is usually the first priority when implementing a planned pavement maintenance program and provides the highest return on investment for pavements.

3.17 Utility Trench Backfill

The onsite fill soils will not be suitable for use as pipe bedding for buried utilities. All pipes should be bedded in a sand, gravel or crushed aggregate imported material complying with the requirements of the Standard Specifications for Public Works Construction (Greenbook) Section 306-1.2.1. Crushed rock products that do not contain appreciable fines should not be utilized as pipe bedding and/or backfill. Bedding materials should be densified to at least 90% relative compaction (ASTM D1557). The geotechnical consultant should review and approve of proposed bedding materials prior to use.

The on-site soils are expected to be suitable as trench backfill provided, they are screened of organic matter, boulders and cobbles over 6 inches in diameter. Trench backfill should be densified to at least 90% relative compaction (ASTM D1557). On-site granular soils with a sand equivalent value of 15 or greater may be water densified initially per Greenbook Specifications. Supplemental mechanical compaction methods will be required to attain the required 90% relative compaction.

All utility trench back fill within street right of way, utility easements, under or adjacent to sidewalks, driveways, or building pads should be observed and tested by the geotechnical consultant to verify proper compaction. Trenches excavated adjacent to foundations should not extend within the footing influence zone defined as the area within a line projected at a 1:1 drawn from the bottom edge of the footing. Trenches crossing perpendicular to foundations should be excavated and backfilled prior to the construction of the foundations. The excavations should be backfilled in the presence of the geotechnical engineer and tested to verify adequate compaction beneath the proposed footing.

Cal/OSHA construction safety orders should be observed during all underground work.

3.18 Drainage

Surface drainage should be directed away from the proposed structures into suitable drainage devices. Neither excess irrigation nor rainwater should be allowed to collect or pond against building foundations or within low-lying or level areas of the lot. Surface waters should be diverted away from the tops of slopes and prevented from draining over the top of slopes and down the slope face.

3.19 Plan Review

Once formal plans are prepared for the subject property, this office should review the plans from a geotechnical

viewpoint, comment on changes from the plan used during preparation of this report and revise the recommendations of this report where necessary.

3.20 Geotechnical Observation and Testing During Grading

The geotechnical engineer should be contacted to provide observation and testing during the following stages of grading:

- During the clearing and grubbing of the site.
- During the demolition of any existing structures, buried utilities or other existing improvements.
- During excavation and over-excavation of existing subgrade.
- During all phases of grading including ground preparation and filling operations.
- When any unusual conditions are encountered during grading.

A grading and compaction report summarizing conditions encountered during grading and the in-place density testing that was performed should be submitted upon completion of the earthwork construction.

3.21 Post-Grading Geotechnical Observation and Testing

After the completion of grading the geotechnical engineer should be contacted to provide additional observation and testing during the following construction activities:

- During trenching and backfilling operations of buried improvements and utilities to verify proper backfill and compaction of the utility trenches.
- After excavation and prior to placement of reinforcing steel or concrete within footing excavations to verify that footings are properly founded in competent materials.
- During fine or precise grading involving the placement of any fills underlying driveways, sidewalks, walkways, or other miscellaneous concrete flatwork to verify proper placement, mixing and compaction of fills.
- When any unusual conditions are encountered during construction.

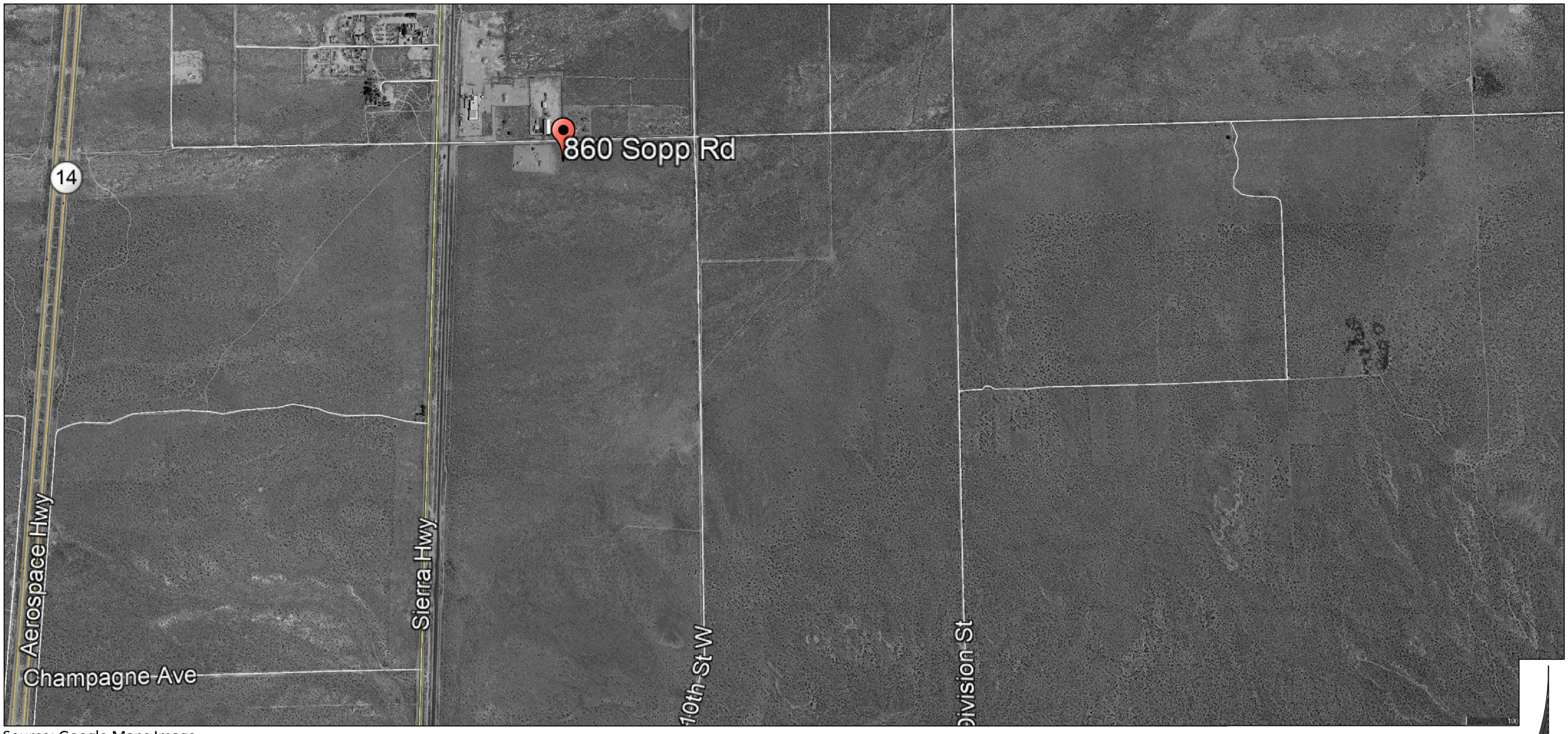
4.00 CLOSURE

This investigation was completed in accordance with generally accepted industry practice to provide recommendations for developing the property from a geotechnical perspective. Information presented in this report is based on research, field investigation, laboratory testing, and engineer judgment obtained from similar projects completed on nearby properties. This assessment is not, and should not be construed as, a warranty or guarantee concerning the geotechnical conditions which may affect the future development of the property. All discovered information has been disclosed and a good faith effort has been made to consult pertinent sources.

This study and report have been prepared on behalf and for the exclusive use of Pacific Steel Group, and solely for use as a preliminary evaluation of the subject site. This report and its findings shall not, in whole or in part, be disseminated or conveyed to any other party, nor used by any other party in whole or in part, without prior written consent of RMA Geoscience, Inc. and Pacific Steel Group. However, RMA Geoscience, Inc. acknowledges and agrees that the report may be conveyed to the design professionals for consideration in developing the property.

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FIGURES



Source: Google Maps Image

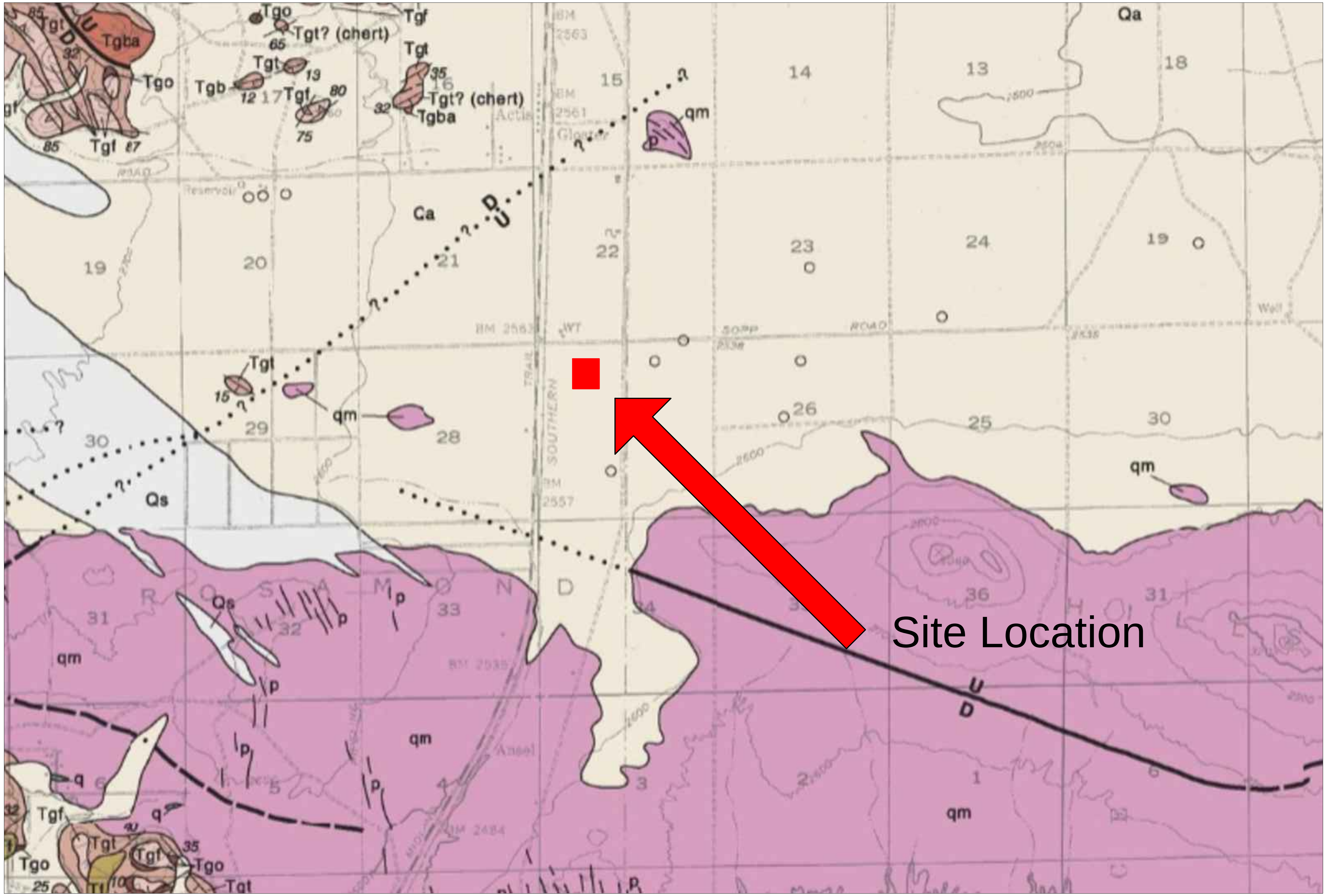
Site Vicinity Map

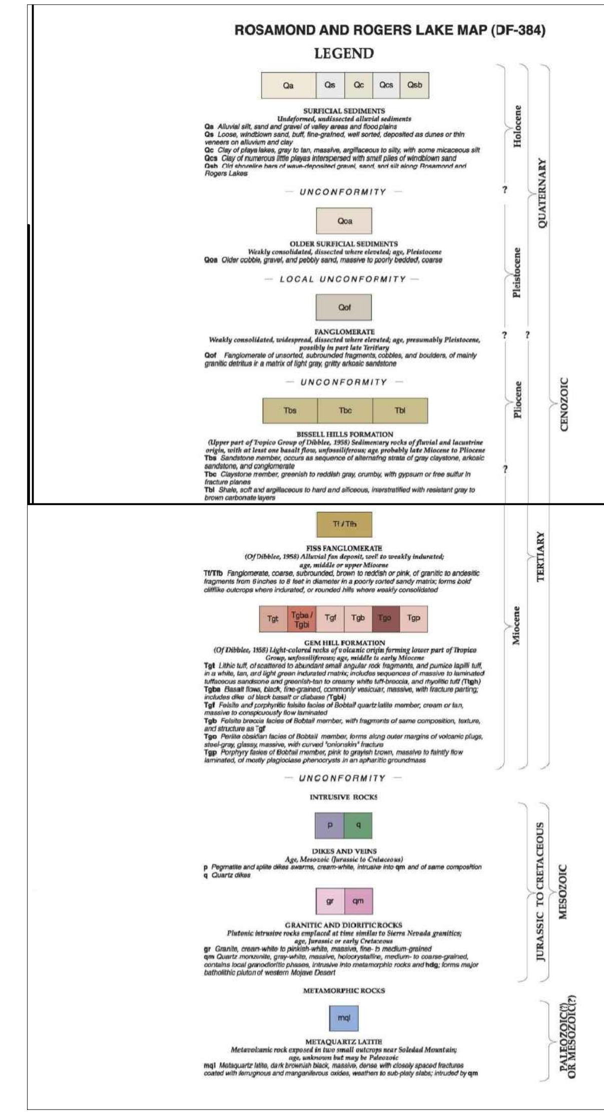
Pacific Steel Group, Micro Mill
860 Sopp Road
Mojave, CA

Figure 1

RMA Job No:	21G-0089
Report Date:	7/2021
Prepared By:	jar

RMA GeoScience




ROSAMOND AND ROGERS LAKE MAP (DF-384)

LEGEND

Qa | Qs | Qc | Qcs | Qsb

SURFICIAL SEDIMENTS
Undeformed, undissected alluvial sediments
Qa Alluvial silt, sand and gravel of valley areas and flood plains
Qs Loose, windblown sand, buff, fine-grained, well sorted, deposited as dunes or thin veneers on alluvium and clay
Qc Clay of playa lakes, gray to tan, massive, argillaceous to silty, with some micaceous silt
Qcs Clay of numerous little playas interspersed with small piles of windblown sand
Qsb Old shoreline bars of wave-deposited gravel, sand, and silt along Rosamond and Rogers Lakes

— UNCONFORMITY —

Qoa

OLDER SURFICIAL SEDIMENTS
Weakly consolidated, dissected where elevated; age, Pleistocene
Qoa Older cobble, gravel, and pebbly sand, massive to poorly bedded, coarse

— LOCAL UNCONFORMITY —

Qof

FANGLOMERATE
Weakly consolidated, widespread, dissected where elevated; age, presumably Pleistocene, possibly in part late Tertiary
Qof Fanglomerate of unsorted, subrounded fragments, cobbles, and boulders, of mainly granitic detritus in a matrix of light gray, gritty arkosic sandstone

— UNCONFORMITY —

Tbs | Tbc | Tbl

BISSELL HILLS FORMATION
(Upper part of Tropico Group of Dibblee, 1958) Sedimentary rocks of fluvial and lacustrine origin, with at least one basalt flow, unfossiliferous; age, probably late Miocene to Pliocene
Tbs Sandstone member, occurs as sequence of alternating strata of gray claystone, arkosic sandstone, and conglomerate
Tbc Claystone member, greenish to reddish gray, crumby, with gypsum or free sulfur in fracture planes
Tbl Shale, soft and argillaceous to hard and siliceous, interstratified with resistant gray to brown carbonate layers

Tf / Tfb

FISS FANGLOMERATE
(Of Dibblee, 1958) Alluvial fan deposit, well to weakly indurated; age, middle or upper Miocene
Tf/Tfb Fanglomerate, coarse, subrounded, brown to reddish or pink, of granitic to andesitic fragments from 6 inches to 8 feet in diameter in a poorly sorted sandy matrix; forms bold clifflike outcrops where indurated, or rounded hills where weakly consolidated

Tgt | Tgba / Tgbi | Tgf | Tgb | Tgo | Tgp

GEM HILL FORMATION
(Of Dibblee, 1958) Light-colored rocks of volcanic origin forming lower part of Tropico Group, unfossiliferous; age, middle to early Miocene
Tgt Lithic tuff, of scattered to abundant small angular rock fragments, and pumice lapilli tuff, in a white, tan, and light green indurated matrix; includes sequences of massive to laminated tuffaceous sandstone and greenish-tan to creamy white tuff-breccia, and rhyolitic tuff (Ttgh)
Tgba Basalt flows, black, fine-grained, commonly vesicular, massive, with fracture parting; includes dike of black basalt or diabase (Tgbi)
Tgf Felsite and porphyritic felsite facies of Bobtail quartz latite member, cream or tan, massive to conspicuously flow laminated
Tgb Felsite breccia facies of Bobtail member, with fragments of same composition, texture, and structure as Tgf
Tgo Perlite obsidian facies of Bobtail member, forms along outer margins of volcanic plugs, steel-gray, glassy, massive, with curved "onionskin" fracture
Tgp Porphyry facies of Bobtail member, pink to grayish brown, massive to faintly flow laminated, of mostly plagioclase phenocrysts in an aphanitic groundmass

— UNCONFORMITY —

INTRUSIVE ROCKS

p | q

DIKES AND VEINS
Age, Mesozoic (Jurassic to Cretaceous)
p Pegmatite and aplite dikes swarms, cream-white, intrusive into **qm** and of same composition
q Quartz dikes

gr | qm

GRANITIC AND DIORITIC ROCKS
Plutonic intrusive rocks emplaced at time similar to Sierra Nevada granitics; age, Jurassic or early Cretaceous
gr Granite, cream-white to pinkish-white, massive, fine- to medium-grained
qm Quartz monzonite, gray-white, massive, holocrystalline, medium- to coarse-grained, contains local granodioritic phases, intrusive into metamorphic rocks and **hdg**; forms major batholithic pluton of western Mojave Desert

METAMORPHIC ROCKS

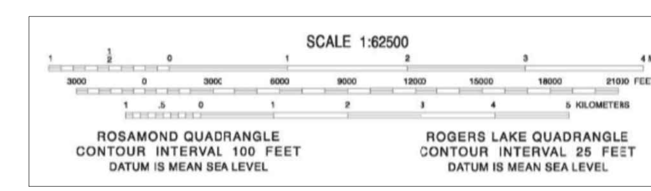
mql

METAQUARTZ LATITE
Metavolcanic rock exposed in two small outcrops near Soledad Mountain; age, unknown but may be Paleozoic
mql Metaquartz latite, dark brownish black, massive, dense with closely spaced fractures coated with ferruginous and manganiferous oxides, weathers to sub-platy slabs; intruded by **qm**

GEOLOGIC MAP OF THE
ROSAMOND & ROGERS LAKE
15 MINUTE QUADRANGLES

KERN & LOS ANGELES COUNTIES, CALIFORNIA

BY THOMAS W. DIBBLEE, JR., 2008
EDITED BY JOHN A. MINCH



Regional Geology Map

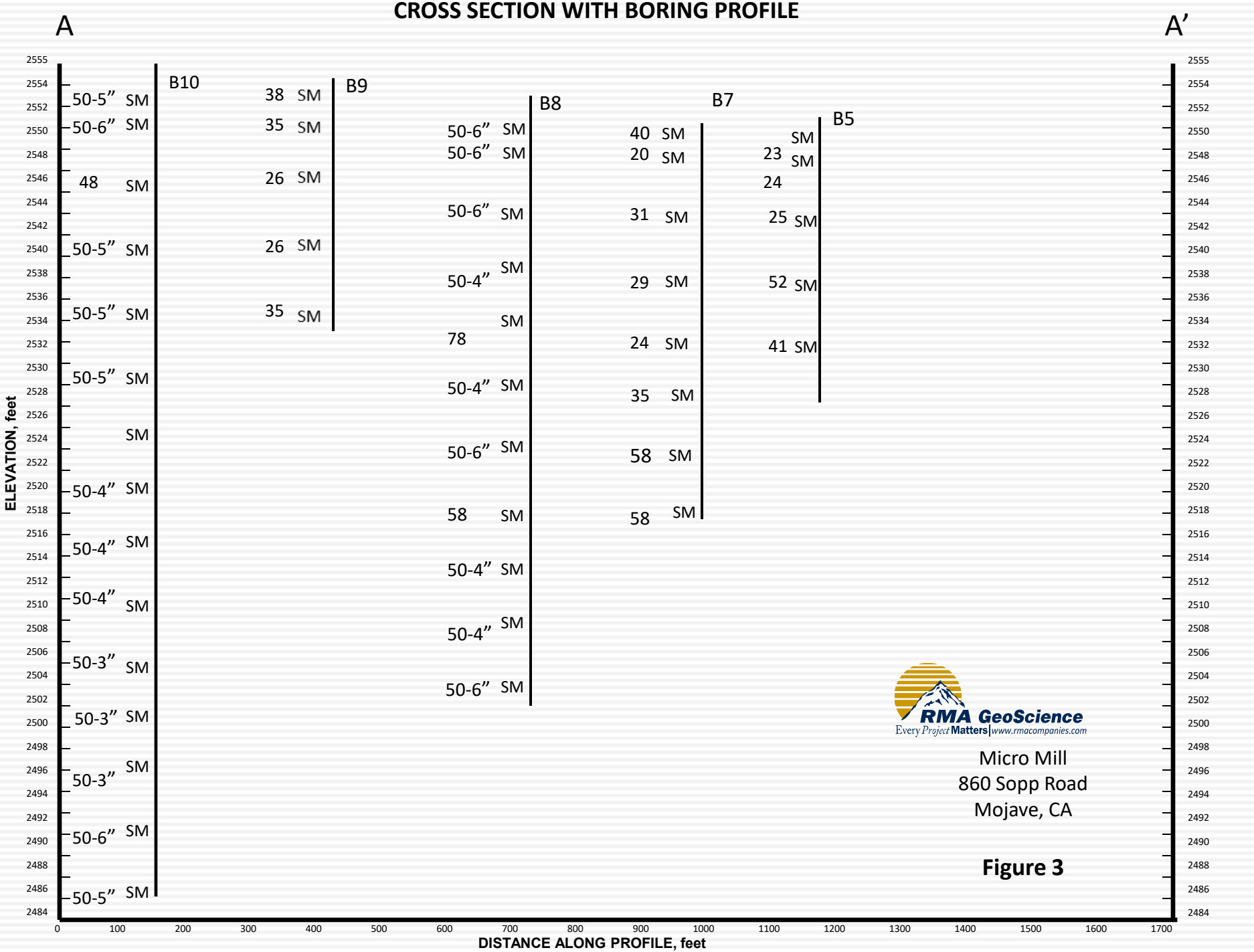
Pacific Steel Group, Micro Mill
860 Sopp Road
Mojave, CA

RMA GeoScience

Figure 2

RMA Job No:	21G-0089
Report Date:	7/2021
Prepared By:	jar

CROSS SECTION WITH BORING PROFILE

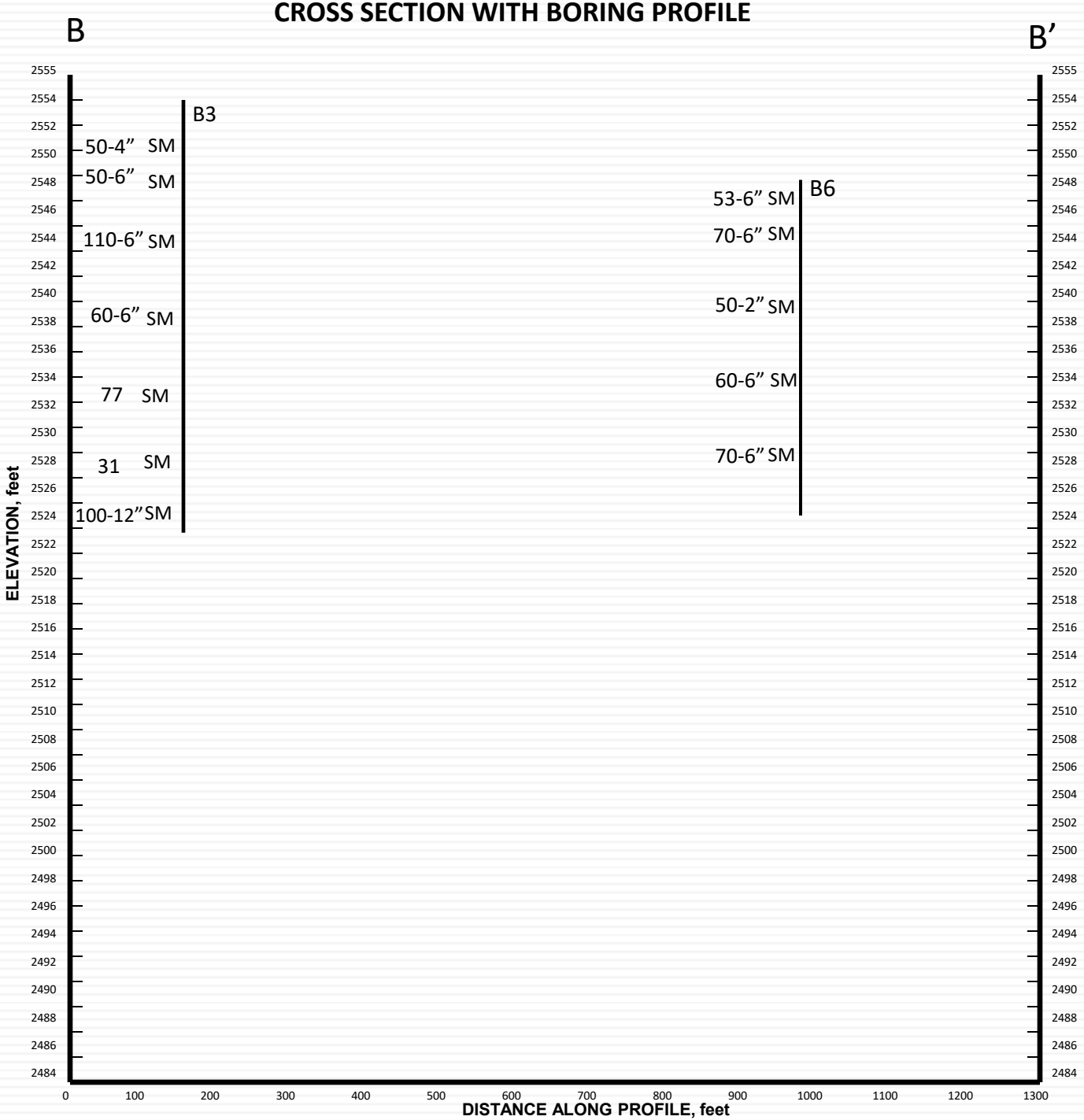


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Micro Mill
860 Sopp Road
Mojave, CA

Figure 3

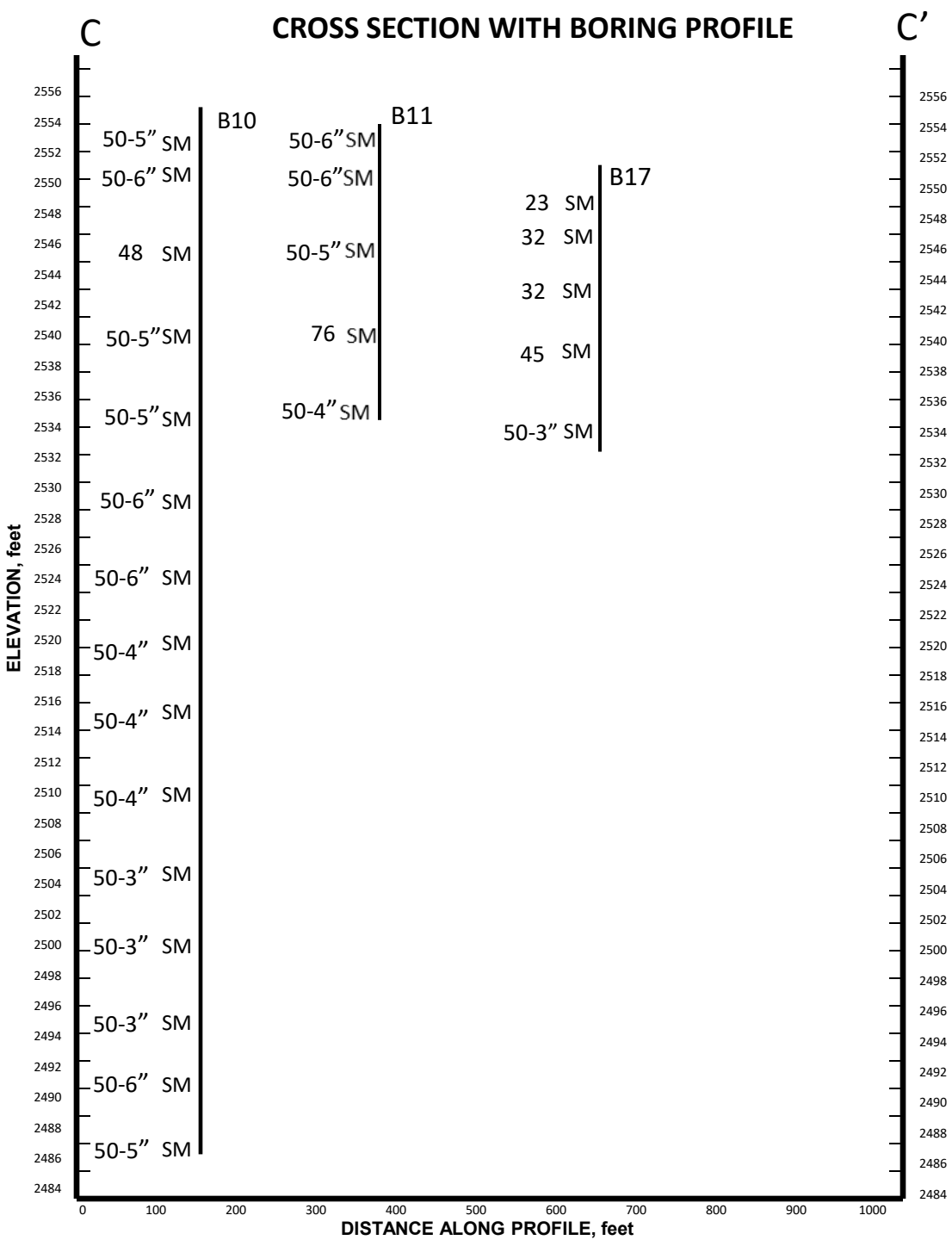
CROSS SECTION WITH BORING PROFILE



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Figure 4



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Micro Mill
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Mojave, CA

Figure 5

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APPENDIX A

FIELD INVESTIGATION

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APPENDIX A

FIELD INVESTIGATION

A-1.00 FIELD EXPLORATION

A-1.01 Number of Test Pits and Borings

Our subsurface investigation consisted of thirty-two (32) backhoe-dug test pits to depths of up to 10 feet and forty-four (44) borings advanced with a hollow stem drill rig to a maximum depth of 70 feet within subject site.

A-1.02 Location of Test Pits and Borings

A Map showing the approximate locations of the test pits and borings are presented as Plate 1, Boring and Test Pit Location Map.

A-1.03 Boring/Test Pit Logs

Logs of borings and test pits were prepared by one of our staff and are attached in this appendix. The logs contain factual information and interpretation of subsurface conditions between samples. The strata indicated on these logs represent the approximate boundary between earth units and the transition may be gradual. The logs show subsurface conditions at the dates and locations indicated, and may not be representative of subsurface conditions at other locations and times.

Identification of the soils encountered during the subsurface exploration was made using the field identification procedure of the Unified Soils Classification System (ASTM D2488). A legend indicating the symbols and definitions used in this classification system and a legend defining the terms used in describing the relative compaction, consistency or firmness of the soil are attached in this appendix. Bag samples of the major earth units were obtained for laboratory inspection and testing, and the in-place density of the various strata encountered in the exploration was determined.

A-1.04 Boring/Test Pit Depths and Coordinates

The boring and test pit depths have been determined based on the project descriptions. The coordinates of borings and test pits hand elevations have been selected from Google Earth. Those information are summarized in the following tables.

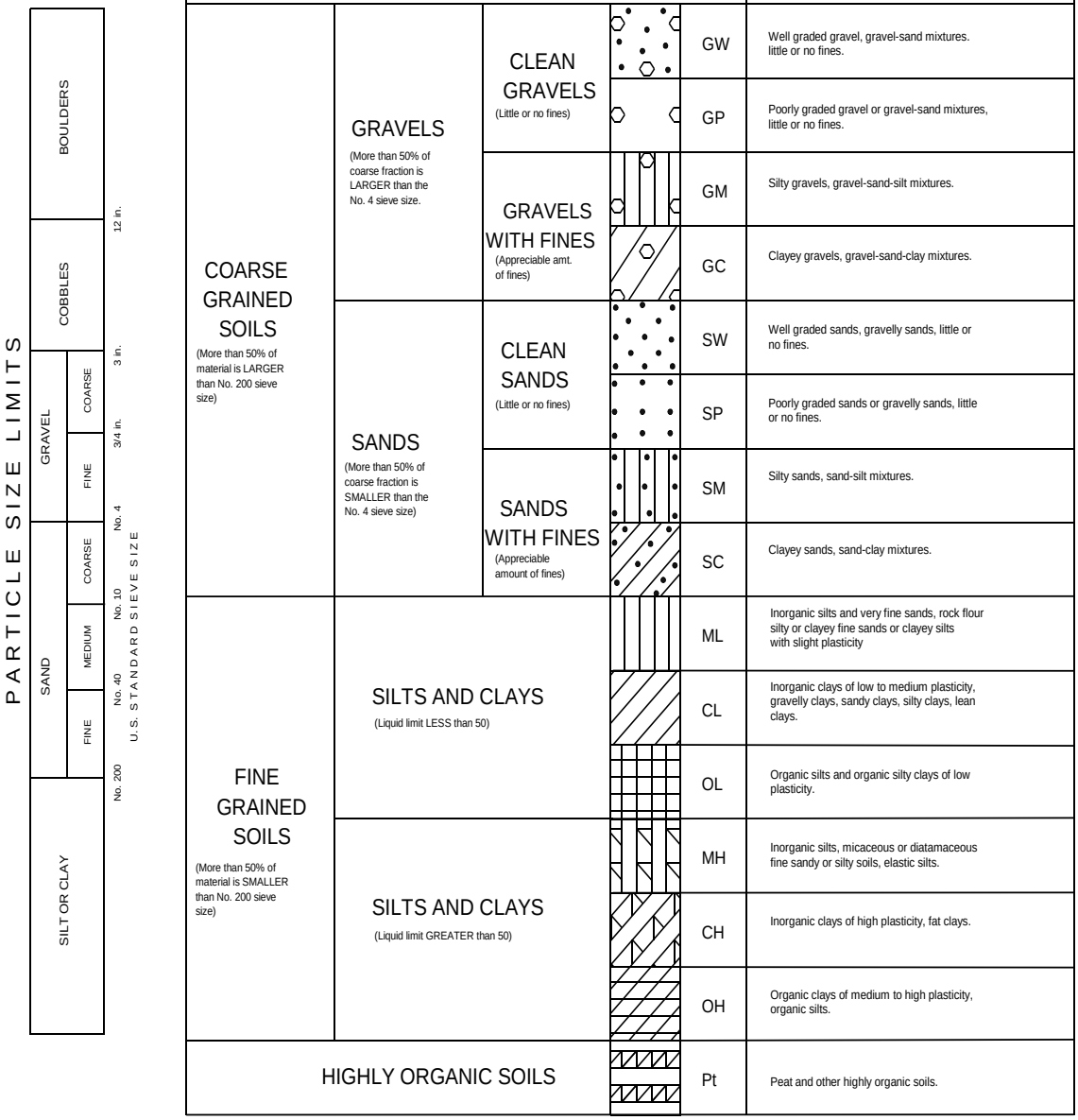
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FIELD EXPLORATION_BOREHOLES_LOCATION & DEPTH_860 SOPP ROAD, MOJAVE, CA

Exploratory Type	No.	Location	Coordinates		Elevation MSL, ft	Depth, ft
			Latitude	Longtitude		
Boring	1	Office Building	34.936796	-118.147052	2560	20
Boring	2	Locker Room	34.936565	-118.146928	2558	20
Boring	3	Stock Bay	34.936022	-118.146099	2554	30
Boring	4	Fabrication Bay	34.936339	-118.143882	2550	50
Boring	5	Rolling Mill	34.935598	-118.145018	2551	30
Boring	6	Rolling Mill	34.935718	-118.143627	2548	20
Boring	7	Rolling Mill	34.935142	-118.144912	2550	30
Boring	8	Rolling Mill	34.934415	-118.144959	2553	50
Boring	9	Rolling Mill	34.933594	-118.144959	2554	20
Boring	10	Scrap/Melg Building	34.932989	-118.144857	2555	70
Boring	11	Scrap/Melg Building	34.932998	-118.144194	2554	20
Boring	12	Warehouse/Vehicle Maintenance	34.934256	-118.144264	2552	30
Boring	13	Warehouse/Vehicle Maintenance	34.933502	-118.144225	2552	15
Boring	14	Oil Storage Building	34.935122	-118.145674	2554	20
Boring	15	Entrance Building	34.934184	-118.141394	2547	20
Boring	16	Staging and Spare Parts Storage	34.933202	-118.143236	2550	20
Boring	17	Bag House	34.932955	-118.143086	2551	20
Boring	18	Refueling Area	34.932974	-118.145620	2557	20
Boring	19	Gas Regulator	34.933468	-118.146208	2558	15
Boring	20	WWTP	34.933685	-118.145669	2556	15
Boring	21	Fire Water Tank	34.934244	-118.145977	2555	20
Boring	22	Septic Field	34.934509	-118.147031	2557	15
Boring	23	Employee Parking	34.936322	-118.147326	2560	10
Boring	24	Employee Parking	34.936940	-118.147636	2561	10
Boring	25	Trailer Parking	34.937128	-118.145533	2556	15
Boring	26	Trailer Parking	34.936616	-118.146132	2556	10
Boring	27	Trailer Parking	34.937197	-118.144063	2552	10
Boring	28	Field Column Yard	34.936763	-118.141503	2546	15
Boring	29	Truck Staging Area	34.935649	-118.142258	2547	15
Boring	30	Gas Tank Storage Area	34.934943	-118.143977	2551	15
Boring	31	Substation	34.934674	-118.142621	2549	20
Boring	32	Settlement Pond	34.934771	-118.141622	2547	20
Boring	33	Entrance	34.933861	-118.140758	2546	10
Boring	34	Scale House & Guard Shack	34.932884	-118.141440	2549	20
Boring	35	Solar Panel	34.930833	-118.141108	2554	15
Boring	36	Solar Panel	34.928986	-118.141386	2556	15
Boring	37	Solar Panel	34.929540	-118.143034	2555	15
Boring	38	Solar Panel	34.929945	-118.143034	2554	15
Boring	39	Solar Panel	34.930776	-118.143388	2552	15
Boring	40	Solar Panel	34.930763	-118.145907	2559	15
Boring	41	Solar Panel	34.930539	-118.148457	2563	15
Boring	42	Solar Panel	34.931863	-118.147912	2561	15
Boring	43	Solar Panel	34.933541	-118.147933	2560	15
Boring	44	Solar Panel	34.935445	-118.147912	2560	15

FIELD EXPLORATION_TESTPITS_LOCATION & DEPTH_860 SOPP ROAD, MOJAVE, CA

Exploratory Type	No.	Location	Coordinates		Depth, ft
			Latitude	Longtitude	
Test Pit	1	Fabrication Bay	34.936359	-118.144992	10
Test Pit	2	Rolling Mill	34.935749	-118.146378	10
Test Pit	3	Stock Bay	34.935992	-118.143933	10
Test Pit	4	Rolling Mill	34.935368	-118.145157	10
Test Pit	5	Rolling Mill	34.934702	-118.145165	10
Test Pit	6	Rolling Mill	34.934098	-118.144619	10
Test Pit	7	Rolling Mill	34.933467	-118.144706	10
Test Pit	8	Scrap/Melg Building	34.932982	-118.144621	10
Test Pit	9	Warehouse/Vehicle Maintenance	34.933873	-118.144220	10
Test Pit	10	Bag House	34.932927	-118.143371	10
Test Pit	11	Employee Parking	34.936606	-118.147586	10
Test Pit	12	Trailer Parking	34.937717	-118.145031	10
Test Pit	13	Field Column Yard	34.936635	-118.142617	10
Test Pit	14	Truck Staging Area	34.935668	-118.141544	10
Test Pit	15	Settlement Pond	34.935106	-118.141896	10
Test Pit	16	Settlement Pond	34.935111	-118.141410	10
Test Pit	17	Settlement Pond	34.934480	-118.141878	10
Test Pit	18	Settlement Pond	34.934469	-118.141408	10
Test Pit	19	Solar Panel	34.931939	-118.141456	10
Test Pit	20	Settlement Pond	34.934460	-118.145690	10
Test Pit	21	Septic Field	34.934229	-118.146713	10
Test Pit	22	Septic Field	34.934506	-118.146963	10
Test Pit	23	Septic Field	34.934213	-118.146959	10
Test Pit	24	Septic Field	34.934511	-118.146685	10
Test Pit	25	Solar Panel	34.934798	-118.148426	10
Test Pit	26	Solar Panel	34.932724	-118.147277	10
Test Pit	27	Solar Panel	34.931305	-118.148515	10
Test Pit	28	Solar Panel	34.930925	-118.147148	10
Test Pit	29	Solar Panel	34.931042	-118.144375	10
Test Pit	30	Solar Panel	34.930645	-118.142231	10
Test Pit	31	Solar Panel	34.928926	-118.144606	10
Test Pit	32	Solar Panel	34.930071	-118.141370	10



BOUNDARY CLASSIFICATIONS: Soils possessing characteristics of two groups are designated by combinations of group symbols.

UNIFIED SOIL CLASSIFICATION SYSTEM

I. SOIL STRENGTH/DENSITY

BASED ON STANDARD PENETRATION TESTS

Compactness of sand		Consistency of clay	
Penetration Resistance N (blows/Ft)	Compactness	Penetration Resistance N (blows/ft)	Consistency
0-4	Very Loose	<2	Very Soft
4-10	Loose	2-4	Soft
10-30	Medium Dense	4-8	Medium Stiff
30-50	Dense	8-15	Stiff
>50	Very Dense	15-30	Very Stiff
		>30	Hard

N = Number of blows of 140 lb. weight falling 30 in. to drive 2-in OD sampler 1 ft.

BASED ON RELATIVE COMPACTION

Compactness of sand		Consistency of clay	
% Compaction	Compactness	% Compaction	Consistency
<75	Loose	<80	Soft
75-83	Medium Dense	80-85	Medium Stiff
83-90	Dense	85-90	Stiff
>90	Very Dense	>90	Very Stiff

II. SOIL MOISTURE

Moisture of sands		Moisture of clays	
% Moisture	Description	% Moisture	Description
<5%	Dry	<12%	Dry
5-12%	Moist	12-20%	Moist
>12%	Very Moist	>20%	Very Moist, wet

RMA GeoScience
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BORING NUMBER 1

Client: Pacific Steel Group
Project Name: Micro Mill
Project Number: 21G-0089-0
Project Location: 860 Sopp Road, Mojave, California
Date Started: 5/17/2021 Completed: 5/17/2021
Ground Elevation: Boring Diameter: 8"
Excavation Method: Hollowstem Auger
Ground Water Levels:
Drilling Contractor: Choice Drilling: Sam and Brad
Notes: Lattitude/Longitude:34.936796/-118.147052
Logged By: mbk Checked By: HHL
140 lbs Auto Hammer with 30" Drop
Google Earth

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
										Wind Blown Deposits (Qs): Light pale orange gray fine to coarse Silty SAND with minor Gravel, sparce scattered imported wood chips, dry, loose			SM
		24,28,44		4.7	129.3	135.0							SM
5		21,50/5"		4.4	124.0	130.0				**Alluvium Deposits (Qa):** Very light yellow gray fine Silty SAND with sparce medium to coarse sand grains and trace fine Gravel, intact, dry to slightly moist, medium dense			SM
										@ 2' Same as above with minor caliche veinlets and nodules, slightly moist, medium dense			
										@ 5' Same as above, slightly moist, medium dense			
10		30,37,50/5"		3.8	112.7	117.0				@ 10' Same as above, fine Silty SAND with trace fine Gravel, caliche			SM
15		100/2"								@ 15' No Sample Recovered			
20		100/4"								@ 20' No Sample Recovered			
										@ 21.5' Same as above, mottled, heavy caliche, dry to slighty moist, medium dense			SM
		32,24,32		4.9									
25										**Total Depth Drilled 23 feet** **No Groundwater Encountered** **No Caving** **Backfilled With Cement-Bentonite Grout 5/17/21**			
30													

Material Description
Thin Wall Tube
2.5" Ring Sample
Bulk Sample
Standard Split Spoon Sample
Static Water Table

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BORING NUMBER 2

Client: Pacific Steel Group
Project Name: Micro Mill
Project Number: 21G-0089-0
Project Location: 860 Sopp Road, Mojave, California
Date Started: 5/17/2021 Completed: 5/17/2021
Ground Elevation: Boring Diameter: 8"
Excavation Method: Hollowstem Auger
Ground Water Levels:
Drilling Contractor: Choice Drilling: Sam and Brad
Notes: Lattitude/Longitude:34.936565/-118.146928
Logged By: mbk Checked By: HHL
140 lbs Auto Hammer with 30" Drop
* Google Earth

Material Description
Thin Wall Tube | 2.5" Ring Sample | Bulk Sample | Standard Split Spoon Sample | Static Water Table

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
										Wind Blown Deposits (Qs): Very light yellow gray fine to coarse Silty SAND, dry and loose			
		6,7,14		3.2						**Alluvium Deposits (Qa):** Very light yellow gray fine Silty SAND, intact, dry to slightly moist, medium dense			
										@ 2' Same as above, slightly moist, medium dense			
5		6,7,7		3.5	115.5	120.0				@ 5' Light yellow gray fine to coarse Silty SAND, no caliche, slightly moist, medium dense			
										- -			
10		8,12,14		4.1						@ 10' Same as above, with fine gravel size caliche nodules, dry to slightly moist, medium dense			
15		41/50/3"		4.6	117.2	122.6				@ 15' Same as above with laminations of caliche rich layers, dry to slightly moist, dense			
20		50/4"								@ 20' No sample returned.			
		25,25,26		5.3						@ 21.5' Same as at 15', mottled caliche and fine gravel size caliche nodules dry to slightly moist, dense			
25													
										Total Depth Drilled 23 feet			
										No Groundwater Encountered			
										No Caving			
30										**Backfilled With Cement-Bentonite Grout 5/17/21**			

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BORING NUMBER 3

Client: Pacific Steel Group
Project Name: Micro Mill
Project Number: 21G-0089-0
Project Location: 860 Sopp Road, Mojave, California
Date Started: 5/17/2021 Completed: 5/17/2021
Ground Elevation: Boring Diameter: 8"
Excavation Method: Hollowstem Auger
Ground Water Levels:
Drilling Contractor: Choice Drilling: Sam and Brad
Notes: Lattitude/Longitude:34.936022/-118.146099
Logged By: mbk Checked By: HHL
140 lbs Auto Hammer with 30" Drop
* Google Earth

Material Description
Thin Wall Tube | 2.5" Ring Sample | Bulk Sample | Standard Split Spoon Sample | Static Water Table

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
										Wind Blown Deposits (Qs): Very light yellow gray fine to coarse Silty SAND, dry and loose in upper 2"			SM
	X	31,50/4"		3.0	109.9	113.2				**Alluvium Deposits (Qa):** Very light yellow gray fine Silty SAND, intact, dry to slightly moist, medium dense			SM
5	X	30,50/6"		5.4	119.4	125.0				@ 2' Same as above, very high caliche content, slightly moist, medium dense			SM
										@ 5' Same as above, fine to coarse Silty SAND, no caliche, slightly moist, medium dense			
10	X	110/6"		6.1	121.3	128.7				@ 10' Same as above, slighlty micaceous, dry to slighlty moist, medium dense			SM SM
										@ 11.25' Very light yellow gray Silty SAND with abundant caliche cement, dry, medium dense			
15	X	60/6"		4.9	120.7	126.6				@ 15' No sample returned on undisturbed sample, sampled the fallout with SPT sampler. Same as above, mottled by caliche although caliche content decreased, slightly moist, dense			SM
20	X	8,11,66		4.4	119.7	125.0				@ 20' Same as above, mottled by caliche, slightly moist, dense			SM
25		9,15,16		3.8						@ 25' Same as above, slightly moist, medium dense			
30	X	100/12"		4.2	116.2	121.0				@ 30' Same as above, medium high caliche content, slightly moist, dense			
										Total Depth Drilled 31.5 feet **No Groundwater Encountered** **No Caving** **Backfilled With Cement-Bentonite Grout 5/17/21**			

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BORING NUMBER 4

Client: Pacific Steel Group
Project Name: Micro Mill
Project Number: 21G-0089-0
Project Location: 860 Sopp Road, Mojave
Date Started: 5/19/2021 Completed: 5/19/2021
Ground Elevation: 2550 Boring Diameter: 8"
Excavation Method: Hollowstem Auger
Ground Water Levels: Not Encountered
Drilling Contractor: Choice Drilling: Sam and Brad
Notes: Lattitude/Longitude:
Logged By: HHL Checked By: mbk
140 lbs Auto Hammer with 30" Drop
Google Earth

Material Description
Thin Wall Tube | 2.5" Ring Sample | Bulk Sample | Standard Split Spoon Sample | Static Water Table

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
										Alluvium Deposits (Qa): Silty Sand with caliche, light brown with white, dry, medium dense to dense			SM
	X	35/50-6"		4.4	122.2	127.5							SM
5	X	26/40/50-6"		4.2	120.7	125.8				- very dense, interbedded caliche lens			SM
10	X	42/50-5"		5.4	116.1	122.3							
15	X	27/50-5"		3.7	120.9	126.0				Silty Sand, light brown to gray brown, slight moist, very dense			SM
20	X	30/40/50-5"								Silty Sand with caliche, light brown with white, slight moist, very dense			SM
25	X	15/25/50-6"		9.6	116.9	128.1				- gray brown with white			SM
30	X	37/50-5"		9.3	122.9	134.3				Silty Sand, dark brown, slight moist, very dense			SM

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BORING NUMBER 4

Client: Pacific Steel Group
Project Name: Micro Mill
Project Number: 21G-0089-0
Project Location: 860 Sopp Road, Mojave
Date Started: 5/19/2021 Completed: 5/19/2021
Ground Elevation: Boring Diameter: 8"
Excavation Method: Hollowstem Auger
Ground Water Levels: Not Encountered
Drilling Contractor: Choice Drilling: Sam and Brad
Notes: Lattitude/Longitude:
Logged By: HHL Checked By:
140 lbs Auto Hammer with 30" Drop
* Google Earth

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
										Silty Sand with gravel, light brown, slight moist, very dense			SM
	X	70-6"		9.7	125.7	137.9							SM
40	X	18/25/42		10.7	125.9	139.4				- dense			SM
										- -			
										- -			
45	X	16/32/50-5"		9.3	127.6	139.5				Clayey sand with caliche, partially cemented, light brown with gray moist, very dense			SC
50	X	42/50-4"		11.2	127.1	141.3				Coarse Sand with silty and gravel, dark brown, moist, very dense			SP
55													
60													
65													

Material Description
Thin Wall Tube
2.5" Ring Sample
Bulk Sample
Standard Split Spoon Sample
Static Water Table

Total Depth Drilled 50 feet
No Groundwater Encountered
No Caving
Backfilled With Cement-Bentonite Grout

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9854 Glenoaks Blvd., Sun Valley, CA 91352

BORING NUMBER 5
Page 1 of 1

Client: Pacific Steel Group
Project Name: Micro Mill
Project Number: 21G-0089-0
Project Location: 860 Sopp Road, Mojave, California
Date Started: 5/17/2021 Completed: 5/17/2021
Ground Elevation: Boring Diameter: 8"
Excavation Method: Hollowstem Auger
Ground Water Levels:
Drilling Contractor: Choice Drilling: Sam and Brad
Notes: Lattitude/Longitude:34.935598/-118.145018
Logged By: mbk Checked By: HHL
140 lbs Auto Hammer with 30" Drop
* Google Earth

Material Description
Thin Wall Tube | 2.5" Ring Sample | Bulk Sample | Standard Split Spoon Sample | Static Water Table

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
										Alluvium Deposits (Qa): Very light yellow gray fine Silty SAND, dry in top 2" with fine gravel and slighlty moist and dense below			SM
		8,11,12		3.9						@ 2' Same as above, dry to slightly moist, medium dense			SM
5		1112,12		4.2						@ 5' Same as above, minor caliche lenses, slightly moist, medium dense			SM
10		9,12,13		5.7						@ 10' Same as above, minor caliche, slightly moist, medium dense			SM
15		14,22,30		4.9						@ 15' Same as above, minor caliche, slightly moist, medium dense			SM
20		14,20,21		5.4						@ 20' Same as above, with minor medium to coarse sand grains, minor caliche, slightly moist, medium dense			SM
25		12,19,20		6.4						@ 25' Light orange brown and orange gray fine Sandy SILT and fine Silty SAND layers, contacts relatively indistinct, slightly moist, medium stiff or medium dense			ML& SM
30		8,9,16		6.9						@ 30' Same as above, fine Sandy SILT, moist, medium stiff			ML
										Total Depth Drilled 31.5 feet			
										No Groundwater Encountered			
										No Caving			
										Backfilled With Cement-Bentonite Grout 5/17/21			

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9854 Glenoaks Blvd., Sun Valley, CA 91352

BORING NUMBER 6

Client: Pacific Steel Group
Project Name: Micro Mill
Project Number: 21G-0089-0
Project Location: 860 Sopp Road, Mojave
Date Started: 5/18/2021 Completed: 5/18/2021
Ground Elevation: Boring Diameter: 8"
Excavation Method: Hollowstem Auger
Ground Water Levels:
Drilling Contractor: Choice Drilling: Sam and Brad
Notes: Lattitude/Longitude:34.935598/-118.145018
Logged By: mbk Checked By: HHL
140 lbs Auto Hammer with 30" Drop
* Google Earth

Material Description
Thin Wall Tube | 2.5" Ring Sample | Bulk Sample | Standard Split Spoon Sample | Static Water Table

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
										Wind Blown Deposits (Qs): Very light yellow gray fine to coarse Silty SAND with vegetation debris, roots, dry and loose			SM
	☒	53/6"	4.1	90.8	94.5					**Alluvium Deposits (Qa):** Very light yellow gray fine Silty SAND, intact, dry to slightly moist, medium dense			SM
5	☒	70/6"	2.7	101.4	104.1					@ 2' Same as above, caliche veinlets, dry, dense @ 5' Same as above, with fine to coarse Silty SAND in sampler tip, caliche veinlets, slightly moist, dense			SM
10	☒	30,50/2"	2.6	112.5	115.5					@ 10' Same as above, fine to medium Silty SAND, slightly moist, dense			SM
15	☒	60/6"	4.7	117.1	122.6					@ 15' Same as above with abundant caliche veinlets and fine gravel sized nodules, slightly moist, dense			SM
20	☒	76/6"	3.2	113.0	116.6					@ 20' Same as above with decrease in Silt content and increase in medium to coarse sand grains, caliche in more silty layers and slightly friable in the sandier layers, slightly moist, dense			SM
25										**Total Depth Drilled 21.5 feet** **No Groundwater Encountered** **No Caving** **Backfilled With Cement-Bentonite Grout 5/18/21**			
30													

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BORING NUMBER 7
Page 1 of 1

Client: Pacific Steel Group
Project Name: Micro Mill
Project Number: 21G-0089-0
Project Location: 860 Sopp Road, Mojave
Date Started: 5/17/2021 Completed: 5/17/2021
Ground Elevation: Boring Diameter: 8"
Excavation Method: Hollowstem Auger
Ground Water Levels:
Drilling Contractor: Choise Drilling: Sam and Brad
Notes: Lattitude/Longitude:34.935142/-118.14412
Logged By: mbk Checked By:
140 lbs Auto Hammer with 30" Drop
* Google Earth

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
										Wind Blown Deposites (Qs): Light yellow gray fine to coarse Silty SAND with roots, dry, loose			SM
		18,19,21	4							**Alluvium Deposits (Qa):** Very light yellow gray fine Silty SAND, intact, dry medium dense			SM
5		6,7,13	4.7							@ 2' Same as above, dry, medium dense @ 5' Same as above, veinlets of caliche, dry, medium dense			SM
10		15,14,17	3.9							@ 10' Very light gray brown, same as above, with caliche nodules the size of fine gravel, dry to slightly moist, medium dense			SM
15		9,13,16	4.1							@ 15' Same as above, less caliche, slightly moist, medium dense			SM
20		8,11,13	5.3							@ 20' Same as above, caliche rich, mottled with gravel sized caliche nodules, dry to slightly moist, medium dense			SM
25		16,17,18	6.9							@ 25' Very light green gray fine Silty SAND with abundant caliche, slightly moist, medium dense			SM
30		14,28,30	6.4							@ 30' Very light orange gray, same as above, slightly moist, dense			SM
										Total Depth Drilled 31.5 feet **No Groundwater Encountered** **No Caving** **Backfilled With Cement-Bentonite Grout 5/18/21**			

Material Description
Thin Wall Tube
2.5" Ring Sample
Bulk Sample
Standard Split Spoon Sample
Static Water Table

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BORING NUMBER 8

Client: Pacific Steel Group
Project Name: Micro Mill
Project Number: 21G-0089-0
Project Location: 860 Sopp Road, Mojave
Date Started: 5/19/2021 Completed: 5/19/2021
Ground Elevation: _____ Boring Diameter: 8"
Excavation Method: Hollowstem Auger
Ground Water Levels: Not Encountered
Drilling Contractor: Choice Drilling: Sam and Brad
Notes: Lattitude/Longitude:
Logged By: HHL Checked By: mbk
140 lbs Auto Hammer with 30" Drop
* Google Earth

Material Description
Thin Wall Tube | 2.5" Ring Sample | Bulk Sample | Standard Split Spoon Sample | Static Water Table

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
										Alluvium Deposits (Qa): Silty Sand, porus, dry, dense			SM
	X	31/50-6"		7.2	108.5	116.3							
5	X	50-6"		5.1	110.5	116.1				Silty Coarse Sand with caliche, grayish brown, dry, dense			SM
10	X	28/50-6"		3.1	112.2	115.7				Medium Sand with silt and caliche, grayish brown with white, slightly moist, dense			SM
15	X	38/47/50-4"		5.1	122.5	128.8				Silty Sand, light brown, slight moist, very dense			SM
20	X	12/35//41		9.1	110.3	120.4				Silty Sand with caliche, grayish brown with white, slight moist, dense			SM
25	X	28/35/50-4"		9.5	112.5	123.2				- very dense			SM
30	X	31/50-6"		9.5	111	121.4				Same as above			SM

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BORING NUMBER 8

Client: Pacific Steel Group | Project Name: Micro Mill

Project Number: 21G-0089-0 | Project Location: 860 Sopp Road, Mojave

Date Started: 5/19/2021 | Completed: 5/19/2021 | Ground Elevation: | Boring Diameter: 8"

Excavation Method: Hollowstem Auger | Ground Water Levels: Not Encountered

Drilling Contractor: Choice Drilling: Sam and Brad | Notes: Lattitude/Longitude:

Logged By: HHL | Checked By: mbk | 140 lbs Auto Hammer with 30" Drop

* Google Earth

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
		15/17/41		26.5	98	123.9				Silty Sand with clay, light brown, moist, dense			SM
40		50-4"		5.6	124.4	131.3				Silty Sand with gravel, dark brown, moist, very dense			SM
45		50-4"		5.4	112.1	118.3				Silty medium to coarse Sand, dark brown, moist, very dense			SM
50		50-6"		13.6	118.5	134.7				Same as above with gravel			
55													
60													
65													

Material Description: Thin Wall Tube; 2.5" Ring Sample; Bulk Sample; Standard Split Spoon Sample; Static Water Table

Total Depth Drilled 50 feet

No Groundwater Encountered

No Caving

Backfilled With Cement-Bentonite Grout

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BORING NUMBER 9

Client: Pacific Steel Group
Project Name: Micro Mill
Project Number: 21G-0089-0
Project Location: 860 Sopp Road, Mojave
Date Started: 5/18/2021 Completed: 5/18/2021
Ground Elevation: Boring Diameter: 8"
Excavation Method: Hollowstem Auger
Ground Water Levels:
Drilling Contractor: Choice Drilling: Sam and Brad
Notes: Lattitude/Longitude:34.933594/-118.144954
Logged By: mbk Checked By:
140 lbs Auto Hammer with 30" Drop
* Google Earth

Material Description
Thin Wall Tube | 2.5" Ring Sample | Bulk Sample | Standard Split Spoon Sample | Static Water Table

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
										Wind Blown Deposits (Qs): Very light yellow gray fine to coarse Silty SAND with minor fine Gravel, roots and dried vegetation debris, dry, loose			SM
		19,18,20		3.5						**Alluvium Deposits (Qa):** Very light yellow gray fine Silty SAND, intact, dry to slightly moist, medium dense			SM
5		7,13,22		4.1						@ 2' Same as above, dry to medium dense @ 5' Same as above, abundant caliche veinlets, dry to slightly moist, medium dense			SM
10		5,10,16		5.5						@ 10' Very light green gray, same as above, slightly moist, medium dense			SM
15		12,14,12		6.1						@ 15' Same as above, caliche veintlets, slightly moist, medium dense			SM
20		17,15,20		5.4						@ 20' Same as above with caliche nodules of fine gravel size and 1" dia.			SM
25										**Total Depth Drilled 21.5 feet** **No Groundwater Encountered** **No Caving** **Backfilled With Cement-Bentonite Grout 5/18/21**			
30													

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BORING NUMBER 10

Client: Pacific Steel Group

Project Name: Micro Mill

Project Number: 21G-0089-0

Project Location: 860 Sopp Road, Mojave

Date Started: 5/19/2021 Completed: 5/19/2021

Ground Elevation: 2555 Boring Diameter: 8"

Excavation Method: Hollowstem Auger

Ground Water Levels: Not Encountered

Drilling Contractor: Choice Drilling: Sam and Brad

Notes: Lattitude/Longitude: 34.932989/-118.144857

Logged By: HHL

Checked By:

140 lbs Auto Hammer with 30" Drop

* Google Earth

Material Description

■ Thin Wall Tube ☒ 2.5" Ring Sample ☒ Bulk Sample ◫ Standard Split Spoon Sample ▽ Static Water Table

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
										Alluvium Deposits (Qa): Silty Sand, light brown, dry, dense			SM
-	☒	25/50-5"		2.7	122.2	125.5							
5	☒	28/31/50-6"		4.8	119.6	125.3				Silty Sand with caliche, light brown with tan, slightly moist, medium dense			
10	☒	16/18/30		3.4	119.1	123.1				- slightly moist			
15	☒	24/50-5"		3.8	102.3	106.2				-very dense			
20	☒	31/50-5"		10.2	114.5	126.2				Coarse Sand with silt, light brown with gray, slightly moist, very dense		SP-SM	
25	☒	22/26/50-6"		6.3	115.6	122.9				sane			
30	☒	50-6"		8.3	111.1	120.3				Silty Sand, light brown, slight moist, very dense		SM	

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BORING NUMBER 10

Client: Pacific Steel Group | Project Name: Micro Mill

Project Number: 21G-0089-0 | Project Location: 860 Sopp Road, Mojave

Date Started: 5/19/2021 | Completed: 5/19/2021 | Ground Elevation: 2555 | Boring Diameter: 8"

Excavation Method: Hollowstem Auger | Ground Water Levels: Not Encountered

Drilling Contractor: Choice Drilling: Sam and Brad | Notes: Lattitude/Longitude:

Logged By: HHL | Checked By: | 140 lbs Auto Hammer with 30" Drop

* Google Earth

Material Description

Thin Wall Tube | 2.5" Ring Sample | Bulk Sample | Standard Split Spoon Sample | Static Water Table

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
	X	30/50-4"		16.6	98.9	115.2				Silty Sand with gravel, light brown with gray, moist, very dense			SM
40	X	50-4"		11.8	115.6	129.2				same			SM
45	X	50-4"		11.2	115.9	128.9				Silty coarse Sand with gravel, lightly brown, moist, very dense			SM
50	X	32/50-3"		10.5	117.5	129.9				Clayey Sand with silt and caliche, dark brown with white, very moist, very dense,			SC
55	X	50-3"		11.9	119.2	133.4				same			SC
60	X	50-3"		12.7	120.2	135.4				Silty Sand, dark brown to redish brown, moist, very dense			SM
65	X	50-6"		12.9	118.1	133.3				same			
										Total Depth Drilled 70 feet			
										No Groundwater Encountered			
										No Caving			
										Backfilled With Cement-Bentonite Grout			
70	X	38/50-5"		11.9	111.9	125.3				Silty Sand, redish brown, moist, very dense			SM

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BORING NUMBER 11

Client: Pacific Steel Group
Project Name: Micro Mill
Project Number: 21G-0089-0
Project Location: 860 Sopp Road, Mojave
Date Started: 5/18/2021 Completed: 5/18/2021
Ground Elevation: Boring Diameter: 8"
Excavation Method: Hollowstem Auger
Ground Water Levels:
Drilling Contractor: Choice Drilling: Sam and Brad
Notes: Lattitude/Longitude:34.932998/-118.144194
Logged By: mbk Checked By: HHL
140 lbs Auto Hammer with 30" Drop
* Google Earth

Material Description
Thin Wall Tube | 2.5" Ring Sample | Bulk Sample | Standard Split Spoon Sample | Static Water Table

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
										Wind Blown Deposits (Qs): Very light yellow gray fine to coarse Silty SAND with fine Gravel, roots and dried vegetation debris, dry, loose			SM
	☒	50/6"		4.5	108.0	112.8				**Alluvium Deposits (Qa):** Very light yellow gray fine Silty SAND, intact, caliche veinlets, dry to slightly moist, medium dense			SM
5	☒	31,50/6"		5.5	109.8	115.9				@ 2' Same as above, dry to slightly moist, medium dense @ 5' Same as above, silt content increased, caliche rich, dry, medium dense			SM
10	☒	31,50/5"		6.5	117.0	124.6				@ 10' Same as above, caliche rich with nodules up to fine gravel size, dry to slightly moist, dense			SM
15	☒	20,36,40		5.9	113.1	119.8				@ 15' very light yellow gray fine to coarse and fine SANDS, and fine Silty SAND layers, friable, dry to slightly moist, dense			SW,SP &SM
20	☒	50,50/4"		5.0	117.7	123.5				@ 20' Very light yellowish brown fine Silty SAND, rich in caliche as at 10', dry to slightly moist, dense			SM
25										**Total Depth Drilled 21.5 feet** **No Groundwater Encountered** **No Caving** **Backfilled With Cement-Bentonite Grout 5/18/21**			
30													

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BORING NUMBER 12

Client: Pacific Steel Group
Project Name: Micro Mill
Project Number: 21G-0089-0
Project Location: 860 Sopp Road, Mojave
Date Started: 5/18/2021 Completed: 5/18/2021
Ground Elevation: Boring Diameter: 8"
Excavation Method: Hollowstem Auger
Ground Water Levels:
Drilling Contractor: Choice Drilling: Sam and Brad
Notes: Lattitude/Longitude:34.936796/-118.147052
Logged By: mbk Checked By:
140 lbs Auto Hammer with 30" Drop
* Google Earth

Material Description
Thin Wall Tube | 2.5" Ring Sample | Bulk Sample | Standard Split Spoon Sample | Static Water Table

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
										Wind Blown Deposits (Qs): Light yellow gray fine to coarse Silty SAND with Gravel, roots, vegetation debris, dry, loose			SM
													SM
		26,50/6"		2.7						**Alluvium Deposits (Qa):** Very light yellow gray fine Silty SAND with caliche veinlets, dry, medium dense			SM
5		15,19,23		4.9						@ 2' Same as above with caliche veinlets, dry to slightly moist medium dense			SM
										@ 2' Same as above with caliche veinlets and nodules, slightly moist, medium dense			
										@ 5' Same as above, dry to slightly moist, medium dense			
10		7,5,3		4.1						@ 10' Same as above, abundant caliche, slighty moist, loose			SM
15		9,16,17		5.1						@ 15' Same as above, silt and caliche content decreased, slightly moist medium dense			SM
20		7,14,17		4.2						@ 20' Same as above silt and caliche content increased, slightly moist medium dense			SIM
25		9,17,19		7.2						@ 25' Same as above, slightly moist, medium dense, with very light orange gray fine to mediuim Silty SAND layer in sampler tip			SM
30		9,15,15		6.7						@ 30' Same as above, fine Silty SAND with abundant caliche veinlets slightly moist, medium dense			SM
										Total Depth Drilled 31.5 feet			
										No Groundwater Encountered			
										No Caving			
										Backfilled With Cement-Bentonite Grout 5/18/21			

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BORING NUMBER 13

Client: Pacific Steel Group
Project Name: Micro Mill
Project Number: 21G-0089-0
Project Location: 860 Sopp Road, Mojave
Date Started: Completed:
Ground Elevation: Boring Diameter: 8"
Excavation Method: Hollowstem Auger
Ground Water Levels:
Drilling Contractor: Choice Drilling: Sam and Brad
Notes: Lattitude/Longitude:34.933502/-118.144225
Logged By: mbk Checked By:
140 lbs Auto Hammer with 30" Drop
* Google Earth

Material Description
Thin Wall Tube | 2.5" Ring Sample | Bulk Sample | Standard Split Spoon Sample | Static Water Table

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
										Wind Blown Deposits (Qs): Light pale orange gray fine to coarse Silty SAND with roots, dry, loose			SM
													SM
	☒	50/50/6"		6.0	110.1	116.7				**Alluvium Deposits (Qa):** Very light yellow gray fine Silty SAND, dry medium dense			SM
5	☒	4,6,15		4.1	121.7	124.7				@ 2' Same as above with minor medium to coarse sand grains, moderate caliche veinlets, slightly moist, medium dense			SM
										@ 5' Very light orange gray and very light yellow gray fine Silty SAND with high caliche and fine to medium SAND with Silt layer, slightly moist, medium dense			
10	☒			6.8	121.7	117.6				@ 10' Very light yellow gray fine Silty SAND with caliche veinlets and minor fine gravel size nodules, slightly friaable, slightly moist, medium dense			SM
15	☒			5.5	111.5	117.6				@ 15' Same as above, slightly moist, medium dense			SM
20										**Total Depth Drilled 16.5 feet** **No Groundwater Encountered** **No Caving** **Backfilled With Cement-Bentonite Grout 5/17/21**			
25													
30													

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BORING NUMBER 14

Client: Pacific Steel Group
Project Name: Micro Mill
Project Number: 21G-0089-0
Project Location: 860 Sopp Road, Mojave
Date Started: Completed:
Ground Elevation: Boring Diameter: 8"
Excavation Method: Hollowstem Auger
Ground Water Levels:
Drilling Contractor: Choice Drilling: Sam and Brad
Notes: Lattitude/Longitude:34.935122/-118.145674
Logged By: mbk Checked By:
140 lbs Auto Hammer with 30" Drop
* Google Earth

Material Description
Thin Wall Tube | 2.5" Ring Sample | Bulk Sample | Standard Split Spoon Sample | Static Water Table

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
										Alluvium Deposits (Qa): Very light yellow gray fine Silty SAND, dry medium dense			SM
	☒	32,50/5"		7.4	102.3	109.9				@ 2' Same as above with minor medium to coarse sand grains, moderate caliche veinlets, slightly moist, medium dense			SM
5	☒	56,50/5"		6.5	100.5	107.1				@ 5' Very light orange gray and very light yellow gray fine Silty SAND with high caliche and fine to medium SAND with Silt layer, slightly moist, medium dense			SM
10	☒	42,50/6"		4.0	108.4	112.7				@ 10' Very light yellow gray fine Silty SAND with caliche veinlets and minor fine gravel size nodules, slightly friaable, slightly moist, medium dense			SM
15	☒	22,50/5"		6.1	116.1	123.2				@ 15' Same as above, slightly moist, medium dense			SM
20	☒	16,26,20		11.0	107.9	119.8				@ 20' Light orange gray fine to coarse and fine SAND with Silt and layers of fine to coarse Silty SAND, no caliche, slightly moist, dense			SW, SP &SM
25										**Total Depth Drilled 21.5 feet** **No Groundwater Encountered** **No Caving** **Backfilled With Cement-Bentonite Grout 5/17/21**			
30													

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BORING NUMBER 15

Client: Pacific Steel Group
Project Name: Micro Mill
Project Number: 21G-0089-0
Project Location: 860 Sopp Road, Mojave
Date Started: 5/20/2021 Completed: 5/20/2021
Ground Elevation: 2547 Boring Diameter: 8"
Excavation Method: Hollowstem Auger
Ground Water Levels: Not Encountered
Drilling Contractor: Choice Drilling: Sam and Brad
Notes: Lattitude/Longitude:34.934184/-118.141394
Logged By: HHL Checked By:
140 lbs Auto Hammer with 30" Drop
* Google Earth

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
										Alluvium Deposits (Qa): Silty Sand with caliche, light brown with gray, dry medium dense			
	☒	20/25/32											SM
5	☒	12/25/29		8.7	117.5	127.7				- dense			SM
10	☒	23/50-6"		6.7	116.9	124.8				- slightly moist, very dense			SM
15	☒	27/50-5"		3.9	102.5	106.5				same			SM
20	☒	35/50-4"								same			SM
25	☒												
30	☒												

Total Depth Drilled 20 feet
No Groundwater Encountered
No Caving
Backfilled With Cement-Bentonite Grout

Thin Wall Tube ☒ 2.5" Ring Sample ☒ Bulk Sample ◫ Standard Split Spoon Sample ▽ Static Water Table

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BORING NUMBER 16

Client: Pacific Steel Group
Project Name: Micro Mill
Project Number: 21G-0089-0
Project Location: 860 Sopp Road, Mojave
Date Started: Completed:
Ground Elevation: 2551* Boring Diameter: 8"
Excavation Method: Hollowstem Auger
Ground Water Levels:
Drilling Contractor: Choice Drilling: Sam and Brad
Notes: Lattitude/Longitude:34.933202/-118.143236
Logged By: mbk Checked By: HHL
140 lbs Auto Hammer with 30" Drop

* Google Earth

Material Description
Thin Wall Tube | 2.5" Ring Sample | Bulk Sample | Standard Split Spoon Sample | Static Water Table

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
										Wind Blown Deposits (Qs): Very light yellow gray fine to coarse Silty SAND with fine Gravel, subangular to subrounded, roots, dry, loose			SM
	X	23,50/4"		5.3	85.7	90.2				**Alluvium Deposits (Qa):** Very light yellow gray fine Silty SAND, dry medium dense			SM
5	X	20,30,50		6.6	101.8	108.5				@ 2' Same as above, caliche rich, dry, medium dense @ 5' Same as above, caliche rich, dry, medium dense			SM
10	X	26,40,42		3.2	118.4	122.2				@ 10' Same as above, caliche rich, dry, medium dense			SM
15	X	70/6"		7.0	114.0	121.9				@ 15' Same as above, silt content decreased, slightly friable, slighlty less caliche veinlets and nodules, slighlty moist, medium dense			SM
20	X	27,50/6"		6.8	106.4	113.6				@ 20' Same as above, silty content increased, abundant caliche veinlets, and nodules, slighty moist, medium dense			SM
25										**Total Depth Drilled 21.5 feet** **No Groundwater Encountered** **No Caving** **Backfilled With Cement-Bentonite Grout 5/17/21**			
30													

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BORING NUMBER 17

Client: Pacific Steel Group
Project Name: Micro Mill
Project Number: 21G-0089-0
Project Location: 860 Sopp Road, Mojave
Date Started: Completed:
Ground Elevation: 2559* Boring Diameter: 8"
Excavation Method: Hollowstem Auger
Ground Water Levels:
Drilling Contractor: Choice Drilling: Sam and Brad
Notes: Lattitude/Longitude:34.932974/-118.145620
Logged By: mbk Checked By: HHL
140 lbs Auto Hammer with 30" Drop

* Google Earth

Material Description
Thin Wall Tube | 2.5" Ring Sample | Bulk Sample | Standard Split Spoon Sample | Static Water Table

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
										Alluvium Deposits (Qa): Very light yellow gray fine Silty SAND, dry medium dense			SM
		7,6,17		3.7						@ 2' Same as above, dry, medium dense			SM
5		12,14,18		3.9						@ 5' Very light orange gray and very light yellow gray fine Silty SAND with high caliche and fine to medium SAND with Silt layer, slightly moist, medium dense			SM
10		11,11,21		5.4						@ 10' Very light yellow gray fine Silty SAND with caliche veinlets and minor fine gravel size nodules, slightly friable, slightly moist, medium dense			SM
15		9,17,28		4.7						@ 15' Same as above, slightly moist, medium dense			SM
20		42,50/3"		6.0						@ 20' Light orange gray fine to coarse and fine SAND with Silt and layers of fine to coarse Silty SAND, no caliche, slightly moist, dense			SM
25										**Total Depth Drilled 21.5 feet** **No Groundwater Encountered** **No Caving** **Backfilled With Cement-Bentonite Grout 5/17/21**			
30													

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BORING NUMBER 18

Client: Pacific Steel Group
Project Name: Micro Mill
Project Number: 21G-0089-0
Project Location: 860 Sopp Road, Mojave
Date Started: 5/18/2021 Completed: 5/18/2021
Ground Elevation: 2557* Boring Diameter: 8"
Excavation Method: Hollowstem Auger
Ground Water Levels:
Drilling Contractor: Choice Drilling: Sam and Brad
Notes: Lattitude/Longitude:34.932974/-118.145620
Logged By: mbk Checked By: HHL
140 lbs Auto Hammer with 30" Drop
* Google Earth

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
										Wind Blown Deposits (Qs): Very light yellow gray fine to coarse Silty SAND with minor fine Gravel, angular to subrounded, dry, loose			SM
		14,15,32		4.0						**Alluvium Deposits (Qa):** Very light yellow gray fine Silty SAND, dry medium dense			SM
5		13,18,33		3.1						@ 2' Same as above with minor medium to coarse sand grains, minor caliche, slightly moist, medium dense			SM
10		7,11,14		4.8						@ 10' Same as above with layers of fine to coarse SAND, slighlty moist, medium dense			SM& SW
15		6,7,21		4.9						@ 15' Same as above, slightly moist, medium dense			SM
20		8,14,38		5.2						@ 20' Same as above with abundant caliche veinlets and nodules up to 1/2" diameter, slightly moist, medium dense			SM
25										**Total Depth Drilled 21.5 feet** **No Groundwater Encountered** **No Caving** **Backfilled With Cement-Bentonite Grout 5/18/21**			
30													

Material Description
Thin Wall Tube
2.5" Ring Sample
Bulk Sample
Standard Split Spoon Sample
Static Water Table

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BORING NUMBER 19

Client: Pacific Steel Group
Project Name: Micro Mill
Project Number: 21G-0089-0
Project Location: 860 Sopp Road, Mojave
Date Started: 5/18/2021 Completed: 5/18/2021
Ground Elevation: 2558* Boring Diameter: 8"
Excavation Method: Hollowstem Auger
Ground Water Levels:
Drilling Contractor: Choice Drilling: Sam and Brad
Notes: Lattitude/Longitude:34.933468/-118.146208
Logged By: mbk Checked By: HHL
140 lbs Auto Hammer with 30" Drop

* Google Earth

Material Description
Thin Wall Tube | 2.5" Ring Sample | Bulk Sample | Standard Split Spoon Sample | Static Water Table

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
										Alluvium Deposits (Qa): Very light yellow gray fine Silty SAND, dry, medium dense			SM
		11,21,34		2.1						@ 2' Very light olive gray fine Silty SAND with caliche veinlets and nodules dry, medium dense			SM
5		18,21,34		4.4						@ 5' Same as above with some medium to coarse grains and caliche veinlets and nodules up to 1/2" diameter, slightly moist, medium dense			SM
10		15,13,18		4.9						@ 10' Very light orange gray fine Silty SAND with abundant caliche, slightly moist, medium dense			SM
15		6,11,18		6.0						@ 15' Same as above with layers of very light gray brown fine to coarse SAND, friable, slightly moist, medium dense			SM
20										**Total Depth Drilled 16.5 feet** **No Groundwater Encountered** **No Caving** **Backfilled With Cement-Bentonite Grout 5/18/21**			
25													
30													

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BORING NUMBER 20

Client: Pacific Steel Group
Project Name: Micro Mill
Project Number: 21G-0089-0
Project Location: 860 Sopp Road, Mojave
Date Started: 5/18/2021 Completed: 5/18/2021
Ground Elevation: 2556* Boring Diameter: 8"
Excavation Method: Hollowstem Auger
Ground Water Levels:
Drilling Contractor: Choice Drilling: Sam and Brad
Notes: Lattitude/Longitude:34.933685/-118.145669
Logged By: mbk Checked By: HHL
140 lbs Auto Hammer with 30" Drop

* Google Earth

Material Description
Thin Wall Tube | 2.5" Ring Sample | Bulk Sample | Standard Split Spoon Sample | Static Water Table

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
										Wind Blown Deposits (Qs): Very light yellow gray fine to coarse Silty SAND with fine Gravel, vegetation debris, dry, loose			SM
		9,28,50/6"		3.6						**Alluvium Deposits (Qa):** Very light yellow gray fine Silty SAND, roots, dry, medium dense			SM
5		13,15,20"		4.9						@ 2' Same as above, with caliche veinlets and nodules, dry, medium dense @ 5' Same as above with a layer of fine to coarse Silty SAND with trace Gravel, caliche veinlets, slightly moist, medium dense			SM
10		13,16,24		4.7						@ 10' Same as above with minor caliche veinlets, slightly moist, medium dense			SM
15		7,13,19		5.6						@ 15' Very light yellow gray fine Silty SAND with abundant caliche veinlets and nodules up to 1/2" diameter, slightly moist, medium dense			SM
20										**Total Depth Drilled 16.5 feet** **No Groundwater Encountered** **No Caving** **Backfilled With Cement-Bentonite Grout 5/18/21**			
25													
30													

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BORING NUMBER 21

Client: Pacific Steel Group
Project Name: Micro Mill
Project Number: 21G-0089-0
Project Location: 860 Sopp Road, Mojave
Date Started: 5/18/2021 Completed: 5/18/2021
Ground Elevation: 2558* Boring Diameter: 8"
Excavation Method: Hollowstem Auger
Ground Water Levels:
Drilling Contractor: Choice Drilling: Sam and Brad
Notes: Lattitude/Longitude:34.934244/-118.147052
Logged By: mbk Checked By: HHL
140 lbs Auto Hammer with 30" Drop
* Google Earth

Material Description
Thin Wall Tube | 2.5" Ring Sample | Bulk Sample | Standard Split Spoon Sample | Static Water Table

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
										Wind Blown Deposits (Qs): Very light yellow gray fine to coarse Silty SAND with fine Gravel, vegetation debris, dry, loose			SM
	X	15,50/5"		2.3	115.3	117.8				**Alluvium Deposits (Qa):** Very light yellow gray fine Silty SAND, roots,dry medium dense			SM
5	X	28,50/4"		3.4	108.0	111.7				@ 2' Same as above with caliche veinlets and nodules, dry, medium dense @ 5' Same as above with caliche veinlets and layer of fine to coarse Silty SAND with trace fine Gravel, slightly moist, medium dense			SM
10	X	28,50/6"		5.2	125.3	131.8				@ 10' Same as above, minor caliche veinlets, slightly moist, medium dense			SM
15	X	2950/6"		8.5	113.4	123.0				@ 15' Very light orange yellow gray fine Silty SAND with abundant caliche veinlets and nodules up to 1/2" diameter, slighlty moist, medium dense			SM
20	X	40,50/3"		4.6	119.5	125.1				@ 20' Same as above, silty content increased, abundant caliche veinlets, and nodules, slighty moist, medium dense			SM
25										**Total Depth Drilled 21.5 feet** **No Groundwater Encountered** **No Caving** **Backfilled With Cement-Bentonite Grout 5/18/21**			
30													

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BORING NUMBER 22

Client: Pacific Steel Group
Project Name: Micro Mill
Project Number: 21G-0089-0
Project Location: 860 Sopp Road, Mojave
Date Started: 5/18/2021 Completed: 5/18/2021
Ground Elevation: 2557* Boring Diameter: 8"
Excavation Method: Hollowstem Auger
Ground Water Levels:
Drilling Contractor: Choice Drilling: Sam and Brad
Notes: Lattitude/Longitude:34.934509/-118.147031
Logged By: mbk Checked By: HHL
140 lbs Auto Hammer with 30" Drop
* Google Earth

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
										Wind Blown Deposits (Qs): Very light yellow gray fine to coarse Silty			SM
										SAND with fine Gravel, angular to subrounded, vegetation debris, dry, loose			SM
		50/6"		3.0	119.7	123.3				**Alluvium Deposits (Qa):** Very light yellow brown fine Silty SAND, dry			SM
										medium dense			
										@ 2' Same as above, with caliche veinlets and nodules, dry, medium dense			
5		41,44,40/6"		3.3	124.1	128.2				@ 5' Very light yellow gray fine to coarse Silty SAND and fine Silty SAND			SM
										layers, caliche veinlets, dry to slightly moist, medium dense			
10		44,50/6"		4.8	120.4	126.2				@ 10' Very light olive gray fine Silty SAND with abundant caliche veinlets			SM
										and nodules up to 1/2" diameter, slighlty moist, dense			
15		50,50?6"		4.5	119.1	124.4				@ 15' Same as above, dry, dence			SM
20										**Total Depth Drilled 16.5 feet**			
										No Groundwater Encountered			
										No Caving			
										Backfilled With Cement-Bentonite Grout 5/18/21			
25													
30													

Material Description
Thin Wall Tube
2.5" Ring Sample
Bulk Sample
Standard Split Spoon Sample
Static Water Table

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BORING NUMBER 23

Client: Pacific Steel Group | Project Name: Micro Mill

Project Number: 21G-0089-0 | Project Location: 860 Sopp Road, Mojave

Date Started: 5/20/2021 Completed: 5/20/2021 | Ground Elevation: 2560 Boring Diameter: 8"

Excavation Method: Hollowstem Auger | Ground Water Levels: Not Encountered

Drilling Contractor: Choice Drilling: Sam and Brad | Notes: Lattitude/Longitude:

Logged By: HHL Checked By: | 140 lbs Auto Hammer with 30" Drop

* Google Earth

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
										Alluvium Deposits (Qa): Silty Sand with abundant caliche, light brown with white, dry, very dense			SM
	☒	42/50-5"		3.5	121.8	126.1							
5	☒	32/42/50-6"		3.9	123.2	128.0				same			SM
10	☒	50-4"		3.3	121.0	125.0				Silty Sand with gravel, light brown, slightly moist, very dense			SM
15	☒									**Total Depth Drilled 10 feet** **No Groundwater Encountered** **No Caving** **Backfilled With Cement-Bentonite Grout**			
20	☒												
25	☒												
30	☒												

Material Description

■ Thin Wall Tube ☒ 2.5" Ring Sample ▨ Bulk Sample ◫ Standard Split Spoon Sample ▽ Static Water Table

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BORING NUMBER 24

Client: Pacific Steel Group | Project Name: Micro Mill

Project Number: 21G-0089-0 | Project Location: 860 Sopp Road, Mojave

Date Started: 5//2021 | Completed: 5//2021 | Ground Elevation: 2561 | Boring Diameter: 8"

Excavation Method: Hollowstem Auger | Ground Water Levels: Not Encountered

Drilling Contractor: Choice Drilling: Sam and Brad | Notes: Lattitude/Longitude:

Logged By: HHL | Checked By: | 140 lbs Auto Hammer with 30" Drop

* Google Earth

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
		7/9/19		2.1						**Alluvium Deposits (Qa):** Silty Sand with caliche, light brown with white, dry			SM
5		10/11/14		4.2						- slightly moist			SM
10		912/10		4.7						Silty Sand with gravel, light brown, medium dense, slightly moist			SM
15													
20													
25													
30													

Thin Wall Tube | 2.5" Ring Sample | Bulk Sample | Standard Split Spoon Sample | Static Water Table

Total Depth Drilled 10 feet

No Groundwater Encountered

No Caving

Backfilled With Cement-Bentonite Grout

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BORING NUMBER 25

Client: Pacific Steel Group | Project Name: Micro Mill

Project Number: 21G-0089-0 | Project Location: 860 Sopp Road, Mojave

Date Started: 5/20/2021 Completed: 5/20/2021 | Ground Elevation: 2556 Boring Diameter: 8"

Excavation Method: Hollowstem Auger | Ground Water Levels: Not Encountered

Drilling Contractor: Choice Drilling: Sam and Brad | Notes: Lattitude/Longitude:

Logged By: HHL Checked By: | 140 lbs Auto Hammer with 30" Drop

* Google Earth

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
										Alluvium Deposits (Qa): Silty Sand to Sandy Silt with gravel,			SM
		4/6/19		3.2						grayish brown, dry medium dense			ML
5		10/14/20		3.7						Silty Sand with caliche, light brown with white, slight moist, dense			SM
10		11/14/9		4.8						- medium dense			
15		21/19/24		3.8						Silty Sand, light brown, lightly moist, dense			SM
20													
25													
30													

Thin Wall Tube | 2.5" Ring Sample | Bulk Sample | Standard Split Spoon Sample | Static Water Table

Total Depth Drilled 15 feet

No Groundwater Encountered

No Caving

Backfilled With Cement-Bentonite Grout

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BORING NUMBER 26

Client: Pacific Steel Group | Project Name: Micro Mill

Project Number: 21G-0089-0 | Project Location: 860 Sopp Road, Mojave

Date Started: 5//2021 | Completed: 5//2021 | Ground Elevation: 2556 | Boring Diameter: 8"

Excavation Method: Hollowstem Auger | Ground Water Levels: Not Encountered

Drilling Contractor: Choice Drilling: Sam and Brad | Notes: Lattitude/Longitude:

Logged By: HHL | Checked By: | 140 lbs Auto Hammer with 30" Drop

* Google Earth

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
										Alluvium Deposits (Qa): Silty Sand with caliche, light brown with white, loose to medium dense, dry			SM
		10/20/33		10.7	119.8	132.6							
5		24/50-5"		3.6	109.6	113.6				- greenish brown with white, dense, dry			SM
10		30/50-5"		3.8	117.0	121.4				- grayish brown, slightly moist			SM
15													
20													
25													
30													

Thin Wall Tube | 2.5" Ring Sample | Bulk Sample | Standard Split Spoon Sample | Static Water Table

Total Depth Drilled 10 feet

No Groundwater Encountered

No Caving

Backfilled With Cement-Bentonite Grout

RMA GeoScience

9854 Glenoaks Blvd., Sun Valley, CA 91352

BORING NUMBER 27

Client: Pacific Steel Group | Project Name: Micro Mill

Project Number: 21G-0089-0 | Project Location: 860 Sopp Road, Mojave

Date Started: 5/20/2021 Completed: 5//2021 | Ground Elevation: 2552 Boring Diameter: 8"

Excavation Method: Hollowstem Auger | Ground Water Levels: Not Encountered

Drilling Contractor: Choice Drilling: Sam and Brad | Notes: Lattitude/Longitude:

Logged By: HHL Checked By: | 140 lbs Auto Hammer with 30" Drop

* Google Earth

Material Description

■ Thin Wall Tube ☒ 2.5" Ring Sample ▨ Bulk Sample ◫ Standard Split Spoon Sample ▽ Static Water Table

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
		10/11/13		2.2						**Alluvium Deposits (Qa):** Silty Sand with caliche and gravel, light brown with white, dry, loose to medium dense			SM
5		11/11/13		4.1						Silty Sand with caliche, porous, Medium Dense, Dry			SM
10		5/14/15		3.5						- Slightly Moist			SM
15													
20													
25													
30													

Total Depth Drilled 10 feet

No Groundwater Encountered

No Caving

Backfilled With Cement-Bentonite Grout

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BORING NUMBER 28

Client: Pacific Steel Group | Project Name: Micro Mill

Project Number: 21G-0089-0 | Project Location: 860 Sopp Road, Mojave

Date Started: 5/20/2021 Completed: 5//2021 | Ground Elevation: 2546 Boring Diameter: 8"

Excavation Method: Hollowstem Auger | Ground Water Levels: Not Encountered

Drilling Contractor: Choice Drilling: Sam and Brad | Notes: Lattitude/Longitude:

Logged By: HHL Checked By: | 140 lbs Auto Hammer with 30" Drop

* Google Earth

Material Description

■ Thin Wall Tube ☒ 2.5" Ring Sample ▨ Bulk Sample ◫ Standard Split Spoon Sample ▽ Static Water Table

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
		10/15/19		1.7						**Alluvium Deposits (Qa):** Silty Sand with Caliche, Grayish Brown with white, dry, medium dense to Dence			SM
5		10/11/20		3.5						Silty Sand with Caliche, Grayish Brown with white, dry, dnse			SM
10		6/16/26		4.9						- Abundant Caliche			SM
15		12/11/27		5.4						Silty Sand, light brown, slightly moist, dense			SM
20													
25													
30													

Total Depth Drilled 15 feet

No Groundwater Encountered

No Caving

Backfilled With Cement-Bentonite Grout

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BORING NUMBER 29

Client: Pacific Steel Group | Project Name: Micro Mill

Project Number: 21G-0089-0 | Project Location: 860 Sopp Road, Mojave

Date Started: 5//2021 | Completed: 5//2021 | Ground Elevation: 2547 | Boring Diameter: 8"

Excavation Method: Hollowstem Auger | Ground Water Levels: Not Encountered

Drilling Contractor: Choice Drilling: Sam and Brad | Notes: Lattitude/Longitude:

Logged By: HHL | Checked By: | 140 lbs Auto Hammer with 30" Drop

* Google Earth

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
		9/8/14	1.9							**Alluvium Deposits (Qa):** Silty Sand with caliche, light brown with caliche dry, meduim dense			SM
5		7/11/14	2.7							- Medium Dense			SM
10		14/17/27	4.2							- Dense			SM
15		13/20/31	4.9							Silty coarse Sand, light brown, slightly moist, very dense			SM
20													
25													
30													

Thin Wall Tube | 2.5" Ring Sample | Bulk Sample | Standard Split Spoon Sample | Static Water Table

Total Depth Drilled 15 feet

No Groundwater Encountered

No Caving

Backfilled With Cement-Bentonite Grout

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9854 Glenoaks Blvd., Sun Valley, CA 91352

BORING NUMBER 30

Client: Pacific Steel Group | Project Name: Micro Mill

Project Number: 21G-0089-0 | Project Location: 860 Sopp Road, Mojave

Date Started: 5/20/2021 Completed: 5//2021 | Ground Elevation: 2551 Boring Diameter: 8"

Excavation Method: Hollowstem Auger | Ground Water Levels: Not Encountered

Drilling Contractor: Choice Drilling: Sam and Brad | Notes: Lattitude/Longitude:

Logged By: HHL Checked By: | 140 lbs Auto Hammer with 30" Drop

* Google Earth

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
										Alluvium Deposits (Qa): Silty Sand with caliche, light brown with white, dry, medium dense to dense			SM
		9/15/20		2.8									
5		9/14/23		3.2						Silty sand with caliche, light brown with white, dry, dense			SM
10		9/9/14		4.8						- slightly moist, medium dense			SM
15		11/10/19		4.9						Silty coarse Sand, light brown, slightly moist, dense			SM
20													
25													
30													

Material Description: Thin Wall Tube; 2.5" Ring Sample; Bulk Sample; Standard Split Spoon Sample; Static Water Table

Total Depth Drilled 15 feet

No Groundwater Encountered

No Caving

Backfilled With Cement-Bentonite Grout

RMA GeoScience

9854 Glenoaks Blvd., Sun Valley, CA 91352

BORING NUMBER 31

Client: Pacific Steel Group | Project Name: Micro Mill

Project Number: 21G-0089-0 | Project Location: 860 Sopp Road, Mojave

Date Started: 5/20/2021 | Completed: 5//2021 | Ground Elevation: 2549 | Boring Diameter: 8"

Excavation Method: Hollowstem Auger | Ground Water Levels: Not Encountered

Drilling Contractor: Choice Drilling: Sam and Brad | Notes: Lattitude/Longitude:

Logged By: HHL | Checked By: | 140 lbs Auto Hammer with 30" Drop

* Google Earth

Material Description

■ Thin Wall Tube | ☒ 2.5" Ring Sample | ▨ Bulk Sample | ◫ Standard Split Spoon Sample | ▽ Static Water Table

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
	☒	42/50-6"		5.5	124.9	131.8				**Alluvium Deposits (Qa):** Silty Sand with caliche, light brown with white, dr, medium dense to dense			SM
										- very dense			
5	☒	49/50-6"		6.5	115.1	122.5				same			SM
										- slightly moist			SM
10	☒	28/50-6"		7.0	117.9	126.1							
15	☒	18/50-6"		4.7	125.8	131.7				Silty Sand, light brown with white, slightly moist, very dense			SM
20	☒	27/50-5"								same			SM
25	☒												
30	☒												

Total Depth Drilled 20 feet

No Groundwater Encountered

No Caving

Backfilled With Cement-Bentonite Grout

RMA GeoScience

9854 Glenoaks Blvd., Sun Valley, CA 91352

BORING NUMBER 32

Client: Pacific Steel Group | Project Name: Micro Mill

Project Number: 21G-0089-0 | Project Location: 860 Sopp Road, Mojave

Date Started: 5/20/2021 | Completed: 5//2021 | Ground Elevation: 2547 | Boring Diameter: 8"

Excavation Method: Hollowstem Auger | Ground Water Levels: Not Encountered

Drilling Contractor: Choice Drilling: Sam and Brad | Notes: Lattitude/Longitude:

Logged By: HHL | Checked By: | 140 lbs Auto Hammer with 30" Drop

* Google Earth

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
										Alluvium Deposits (Qa): Silty Sand with caliche lens, grayish brown, dry, medium dense to dense.			SM
		14/37/42		5.8	119.2	126.1							
5		14/37/42		8.3	114.8	124.3				same			SM
10		50-4"		11.7	104.6	116.8				Silty sand with caliche, light brown and grayish brown, slighty moist, very dense.			SM
15		20/50-6"		7.9	119.6	126.0				Silty Sand, light brown, slightly moist, very dense			SM
20		20/32/50-6"		6.3	126.1	134.0				same			SM
25													
30													

Material Description: Thin Wall Tube; 2.5" Ring Sample; Bulk Sample; Standard Split Spoon Sample; Static Water Table

Total Depth Drilled 20 feet

No Groundwater Encountered

No Caving

Backfilled With Cement-Bentonite Grout

RMA GeoScience

9854 Glenoaks Blvd., Sun Valley, CA 91352

BORING NUMBER 33

Client: Pacific Steel Group | Project Name: Micro Mill

Project Number: 21G-0089-0 | Project Location: 860 Sopp Road, Mojave

Date Started: 5/20/2021 | Completed: 5//2021 | Ground Elevation: 2546 | Boring Diameter: 8"

Excavation Method: Hollowstem Auger | Ground Water Levels: Not Encountered

Drilling Contractor: Choice Drilling: Sam and Brad | Notes: Lattitude/Longitude:

Logged By: HHL | Checked By: | 140 lbs Auto Hammer with 30" Drop

* Google Earth

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
										Alluvium Deposits (Qa): Silty Sand, medium to course with caliche, light brown with white, slightly moist, medium to very dense.			SM
		20/19/37		4.1	124.2	129.3							
5		19/42/50-6"		4.8	126.2	132.2				Silty sand with caliche, light brown to grayish brown with white, slighty moist, medium dense			SM
10		28/20/17		5.2	114.7	120.6				same			SM
15													
20													
25													
30													

Material Description: ■ Thin Wall Tube; ☒ 2.5" Ring Sample; ▨ Bulk Sample; ◫ Standard Split Spoon Sample; ▽ Static Water Table

Total Depth Drilled 10 feet

No Groundwater Encountered

No Caving

Backfilled With Cement-Bentonite Grout

RMA GeoScience

9854 Glenoaks Blvd., Sun Valley, CA 91352

BORING NUMBER 34

Client: Pacific Steel Group | Project Name: Micro Mill

Project Number: 21G-0089-0 | Project Location: 860 Sopp Road, Mojave

Date Started: 5/21/2021 | Completed: 5//2021 | Ground Elevation: 2549 | Boring Diameter: 8"

Excavation Method: Hollowstem Auger | Ground Water Levels: Not Encountered

Drilling Contractor: Choice Drilling: Sam and Brad | Notes: Lattitude/Longitude:

Logged By: HHL | Checked By: | 140 lbs Auto Hammer with 30" Drop

* Google Earth

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
										Material Description: ■ Thin Wall Tube; ☒ 2.5" Ring Sample; ▨ Bulk Sample; ◫ Standard Split Spoon Sample; ▽ Static Water Table			
										Alluvium Deposits (Qa): Silty Sand with caliche, light brown with white, slightly moist, very dense, porous			SM
		50-6"		14.0	102.1	116.3							
5		11/30/40		11.6	118.9	132.7				- Dense,			SM
10		40/52-3"		6.4	114.6	121.9				Silty sand with abundant caliche, light brown with gray, slightly moist, very dense			SM
15		50-6"		9.5	120.2	131.7				- Light brown with gray			SM
20		32/50-5"		10.2	122.5	135.0				Silty Sand, light brown, slightly moist, very dense			SM
25													
30													

Total Depth Drilled 20 feet

No Groundwater Encountered

No Caving

Backfilled With Cement-Bentonite Grout

RMA GeoScience

9854 Glenoaks Blvd., Sun Valley, CA 91352

BORING NUMBER 35

Client: Pacific Steel Group | Project Name: Micro Mill

Project Number: 21G-0089-0 | Project Location: 860 Sopp Road, Mojave

Date Started: 5/20/2021 | Completed: 5//2021 | Ground Elevation: 2554 | Boring Diameter: 8"

Excavation Method: Hollowstem Auger | Ground Water Levels: Not Encountered

Drilling Contractor: Choice Drilling: Sam and Brad | Notes: Lattitude/Longitude:

Logged By: HHL | Checked By: | 140 lbs Auto Hammer with 30" Drop

* Google Earth

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
										Alluvium Deposits (Qa): Silty Sand with clay and caliche, dark brown, moist, medium dense to dense			SM
		21/50-6"		7.1	119.2	127.7							
5		20/50-5"		8.0	121.1	130.8				- very dense			SM
10		30/50-3"		5.6	116.8	123.2				same			SM
15		50-6"		7.7	123.2	132.7				Silty medium to coarse sand, light brown, slightly moist, very dense			SM
20													
25													
30													

Material Description: ■ Thin Wall Tube; ☒ 2.5" Ring Sample; ▨ Bulk Sample; ◫ Standard Split Spoon Sample; ▽ Static Water Table

Total Depth Drilled 15 feet

No Groundwater Encountered

No Caving

Backfilled With Cement-Bentonite Grout

RMA GeoScience

9854 Glenoaks Blvd., Sun Valley, CA 91352

BORING NUMBER 36

Client: Pacific Steel Group | Project Name: Micro Mill

Project Number: 21G-0089-0 | Project Location: 860 Sopp Road, Mojave

Date Started: 5/21/2021 Completed: 5//2021 | Ground Elevation: 2556 Boring Diameter: 8"

Excavation Method: Hollowstem Auger | Ground Water Levels: Not Encountered

Drilling Contractor: Choice Drilling: Sam and Brad | Notes: Lattitude/Longitude:

Logged By: HHL Checked By: | 140 lbs Auto Hammer with 30" Drop

* Google Earth

Material Description

■ Thin Wall Tube ☒ 2.5" Ring Sample ▨ Bulk Sample ◫ Standard Split Spoon Sample ▽ Static Water Table

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
	☒	24/25/32		6.2	118.9	126.3				**Alluvium Deposits (Qa):** Silty Sand with caliche, light brown with gray, slightly moist, medium			SM
5	☒	21/50-6"		7.5	121.8	130.9							
10	☒	50-6"		6.4	108.2	115.2				Silty medium to coarse Sand with gravel, light brown, slightly moist very dense			SM
15	☒	33/50-6"		8.5	121.1	131.4				same			SM
20	☒												
25	☒												
30	☒												

Total Depth Drilled 15 feet

No Groundwater Encountered

No Caving

Backfilled With Cement-Bentonite Grout

RMA GeoScience

9854 Glenoaks Blvd., Sun Valley, CA 91352

BORING NUMBER 37

Client: Pacific Steel Group | Project Name: Micro Mill

Project Number: 21G-0089-0 | Project Location: 860 Sopp Road, Mojave

Date Started: 5/21/2021 Completed: 5//2021 | Ground Elevation: 2555 Boring Diameter: 8"

Excavation Method: Hollowstem Auger | Ground Water Levels: Not Encountered

Drilling Contractor: Choice Drilling: Sam and Brad | Notes: Lattitude/Longitude:

Logged By: HHL Checked By: | 140 lbs Auto Hammer with 30" Drop

* Google Earth

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
										Alluvium Deposits (Qa): Silty Sand course with gravel and caliche, light brown with gray. Slightly moist, medium dense to dense.			SM
		23/26/33		4.8	122.8	128.7							
5		42/50-4"		6.6	128.2	136.6				- very dense			SM
										Silty sand, partially cemented, dry, very dense.			SM
10		50-6"		6.1	114.4	121.4							
15		50-6"		7.1	119.9	128.4				same			SM
20													
25													
30													

Material Description

Thin Wall Tube | 2.5" Ring Sample | Bulk Sample | Standard Split Spoon Sample | Static Water Table

Total Depth Drilled 15 feet

No Groundwater Encountered

No Caving

Backfilled With Cement-Bentonite Grout

RMA GeoScience

9854 Glenoaks Blvd., Sun Valley, CA 91352

BORING NUMBER 38

Client: Pacific Steel Group | Project Name: Micro Mill

Project Number: 21G-0089-0 | Project Location: 860 Sopp Road, Mojave

Date Started: 5/21/2021 Completed: 5//2021 | Ground Elevation: 2554 Boring Diameter: 8"

Excavation Method: Hollowstem Auger | Ground Water Levels: Not Encountered

Drilling Contractor: Choice Drilling: Sam and Brad | Notes: Lattitude/Longitude:

Logged By: HHL Checked By: | 140 lbs Auto Hammer with 30" Drop

* Google Earth

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
										Alluvium Deposits (Qa): Silty medium to course Sand with gravel, light brown with gray, slightly moist, medium dense to dense			SM
		14/12/33		6.2	117.9	125.2							
5		13/21/36		14.2	116.1	132.7							SM
10		30/50-5"		9.0	123.3	134.4				Silty sand, light brown with gray, slightly moist, very dense			SM
15		31/50-5"		8.2	108.0	116.8				Silty sand with caliche, light brown with gray, slightly moist, very dense			SM
20													
25													
30													

Material Description

Thin Wall Tube | 2.5" Ring Sample | Bulk Sample | Standard Split Spoon Sample | Static Water Table

Total Depth Drilled 15 feet

No Groundwater Encountered

No Caving

Backfilled With Cement-Bentonite Grout

RMA GeoScience

9854 Glenoaks Blvd., Sun Valley, CA 91352

BORING NUMBER 39

Client: Pacific Steel Group | Project Name: Micro Mill

Project Number: 21G-0089-0 | Project Location: 860 Sopp Road, Mojave

Date Started: 5/21/2021 | Completed: 5//2021 | Ground Elevation: 2552 | Boring Diameter: 8"

Excavation Method: Hollowstem Auger | Ground Water Levels: Not Encountered

Drilling Contractor: Choice Drilling: Sam and Brad | Notes: Lattitude/Longitude:

Logged By: HHL | Checked By: | 140 lbs Auto Hammer with 30" Drop

* Google Earth

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
		7/28/22	5.2							**Alluvium Deposits (Qa):** Silty Sand with caliche, grayish brown with white, dry to slightly moist, medium dense to dense			SM
5		9/11/16	5.9							- medium dense			SM
10		7/11/20	7.8							- dense			SM
15		15/19/27	9.8										
20													
25													
30													

Material Description: ■ Thin Wall Tube; ☒ 2.5" Ring Sample; ▨ Bulk Sample; ◫ Standard Split Spoon Sample; ▽ Static Water Table

Total Depth Drilled 15 feet

No Groundwater Encountered

No Caving

Backfilled With Cement-Bentonite Grout

RMA GeoScience

9854 Glenoaks Blvd., Sun Valley, CA 91352

BORING NUMBER 40

Client: Pacific Steel Group | Project Name: Micro Mill

Project Number: 21G-0089-0 | Project Location: 860 Sopp Road, Mojave

Date Started: 5/21/2021 | Completed: 5//2021 | Ground Elevation: 2559 | Boring Diameter: 8"

Excavation Method: Hollowstem Auger | Ground Water Levels: Not Encountered

Drilling Contractor: Choice Drilling: Sam and Brad | Notes: Lattitude/Longitude:

Logged By: HHL | Checked By: | 140 lbs Auto Hammer with 30" Drop

* Google Earth

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
										Alluvium Deposits (Qa): Silty Sand with caliche, light brown with gray, dry, loose to dense.			SM
		17/22/50-6"		4.5	113.8	118.9							
5		25/50-3"		7.6	121.5	160.7							
										Silty sand partially cemented, light brown with gray brown,			SM
10		26/50-4"		8.4	108.2	117.3				slightly moist, very dense.			
15		32/50-6"		8.8	112.5	122.4				Silty Sand, light brown, slightly moist			SM
20													
25													
30													

Material Description: Thin Wall Tube; 2.5" Ring Sample; Bulk Sample; Standard Split Spoon Sample; Static Water Table

Total Depth Drilled 15 feet

No Groundwater Encountered

No Caving

Backfilled With Cement-Bentonite Grout

RMA GeoScience

9854 Glenoaks Blvd., Sun Valley, CA 91352

BORING NUMBER 41

Client: Pacific Steel Group | Project Name: Micro Mill

Project Number: 21G-0089-0 | Project Location: 860 Sopp Road, Mojave

Date Started: 5/21/2021 Completed: 5//2021 | Ground Elevation: 2563 Boring Diameter: 8"

Excavation Method: Hollowstem Auger | Ground Water Levels: Not Encountered

Drilling Contractor: Choice Drilling: Sam and Brad | Notes: Lattitude/Longitude:

Logged By: HHL Checked By: | 140 lbs Auto Hammer with 30" Drop

* Google Earth

Material Description

■ Thin Wall Tube ☒ 2.5" Ring Sample ☒ Bulk Sample ◫ Standard Split Spoon Sample ▽ Static Water Table

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
	☒	23/29/39		3.7	122.0	126.6				**Alluvium Deposits (Qa):** Silty Sand with gravel and caliche, light brown with gray brown, slightly moist, dense.			SM
5	☒	31/32/44		6.0	110.9	117.5							
10	☒	42/50-6"		4.8	123.9	129.8				- very dense			SM
15	☒	45/50-6"		6.9	125.3	133.9				Silty sand with caliche layers, dark brown with gray, slightly moist			SM
20	☒												
25	☒												
30	☒												

Total Depth Drilled 15 feet

No Groundwater Encountered

No Caving

Backfilled With Cement-Bentonite Grout

RMA GeoScience

9854 Glenoaks Blvd., Sun Valley, CA 91352

BORING NUMBER 42

Client: Pacific Steel Group | Project Name: Micro Mill

Project Number: 21G-0089-0 | Project Location: 860 Sopp Road, Mojave

Date Started: 5/21/2021 Completed: 5//2021 | Ground Elevation: 2561 Boring Diameter: 8"

Excavation Method: Hollowstem Auger | Ground Water Levels: Not Encountered

Drilling Contractor: Choice Drilling: Sam and Brad | Notes: Lattitude/Longitude:

Logged By: HHL Checked By: | 140 lbs Auto Hammer with 30" Drop

* Google Earth

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
		10/12/33		2.9						**Alluvium Deposits (Qa):** Silty Sand with gravel and caliche, light brown with gray, slightly moist, medium dense to dense			SM
5		12/14/19		4.8									
10		8/11/22		4.4						Same			SM
15		12/23/25		5.2						Silty Sand, light brown, slightly moist, dense			SM
20													
25													
30													

Material Description: Thin Wall Tube; 2.5" Ring Sample; Bulk Sample; Standard Split Spoon Sample; Static Water Table

Total Depth Drilled 15 feet

No Groundwater Encountered

No Caving

Backfilled With Cement-Bentonite Grout

RMA GeoScience

9854 Glenoaks Blvd., Sun Valley, CA 91352

BORING NUMBER 43

Client: Pacific Steel Group | Project Name: Micro Mill

Project Number: 21G-0089-0 | Project Location: 860 Sopp Road, Mojave

Date Started: 5/21/2021 Completed: 5//2021 | Ground Elevation: 2560 Boring Diameter: 8"

Excavation Method: Hollowstem Auger | Ground Water Levels: Not Encountered

Drilling Contractor: Choice Drilling: Sam and Brad | Notes: Lattitude/Longitude:

Logged By: HHL Checked By: | 140 lbs Auto Hammer with 30" Drop

* Google Earth

Material Description

■ Thin Wall Tube ☒ 2.5" Ring Sample ☒ Bulk Sample ◫ Standard Split Spoon Sample ▽ Static Water Table

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
	☒	26/38/42		7.5	129.5	139.3				**Alluvium Deposits (Qa):** Silty Sand with caliche, light brown with gray, dry, loose to dense.			SM
5	☒	32/50-6"		3.8	112.8	117.1				- very dense			SM
										- Slightly moist			SM
10	☒	50-6"		4.1	121.1	1261							
										Silty medium to course sand, dry, gray brown, very dense.			SM
15	☒	17/40/50-5"		5.9	119.9	127.0							
20	☒												
25	☒												
30	☒												

Total Depth Drilled 15 feet

No Groundwater Encountered

No Caving

Backfilled With Cement-Bentonite Grout

RMA GeoScience

9854 Glenoaks Blvd., Sun Valley, CA 91352

BORING NUMBER 44

Client: Pacific Steel Group | Project Name: Micro Mill

Project Number: 21G-0089-0 | Project Location: 860 Sopp Road, Mojave

Date Started: 5/20/2021 | Completed: 5//2021 | Ground Elevation: 2560 | Boring Diameter: 8"

Excavation Method: Hollowstem Auger | Ground Water Levels: Not Encountered

Drilling Contractor: Choice Drilling: Sam and Brad | Notes: Lattitude/Longitude:

Logged By: HHL | Checked By: | 140 lbs Auto Hammer with 30" Drop

* Google Earth

Depth (ft)	Drive Sample	Blow Count (N Value)	Bulk Sample	Moisture Content (%)	Dry Unit Weight (pcf)	Wet Unit Weight (pcf)	Liquid Limit	Plastic Limit	Plasticity Index	Material Description	<#200	D_{50}	USCS Classification
										Alluvium Deposits (Qa): Silty Sand with caliche, light brown with gray, dry, loose to dense			SM
		50-6"		3.0	115.0	118.5				Silty sand with caliche, light brown with white, dry, porous, very dense.			
5		32/50-6"		7.8	126.1	135.9				- very dense			SM
10		42/50-6"		4.6	119.4	124.9				- gray brown			SM
15		23/50-6"		6.6	125.2	133.5				Silty Sand, light brown, slight moist, very dense			SM
20													
25													
30													

Material Description: Thin Wall Tube; 2.5" Ring Sample; Bulk Sample; Standard Split Spoon Sample; Static Water Table

Total Depth Drilled 15 feet

No Groundwater Encountered

No Caving

Backfilled With Cement-Bentonite Grout

Log of Exploratory Test Pit

Project Name: Pacific Steel Group
Job Number: 21G-0089
Equipment: Northwest Excavating
Logged By: HHL Elevation:

Test Pit Number: 1 Date: May 11, 2021
Location: 860 Sopp Road, Mojave
Latitude: 34.9363 Longtitude:-118.1449

USCS	Material Description
SM to ML	**0-14":** (**Top Soil)** Silty Sand to Sandy Silt light brown, dry, roots and rootlets, loose to medium dense, porous
SM	**14"-2.2 feet Alluvium (Qal):** Silty medium Sand with abundant caliche, tan-dark brown, slightly moist, medium dense
SM	**2.2-10 feet:** Silty medium to coarse Sand, dark brown, moist, dense
	TD= 10 feet

Log of Exploratory Test Pit

Project Name: Pacific Steel Group
Job Number: 21G-0089
Equipment: Northwest Excavating
Logged By: HHL Elevation:

Test Pit Number: 2 Date: May , 2021
Location: 860 Sopp Road, Mojave
Latitude: 34.9357 Longtitude:-118.1463

USCS	Material Description
SM to ML	**0-8":** Silty Sand, with organics including rootlets, light brown, dry, loose, porous
SM	**8"-3.3 feet Alluvium (Qal):** Silty Sand, light brown-white, caliche, dry, dense
SM	**3.3-6.3 feet:** medium coarse Sand with silt, light brown, dry, medium dense
SM	**6.3-10 feet:** Silty Sand with caliche, dark brown, medium dense
	TD=10 feet

Log of Exploratory Test Pit

Project Name: Pacific Steel Group
Job Number: 21G-0089
Equipment: Northwest Excavating
Logged By: HHL Elevation:

Test Pit Number: 3 Date: May , 2021
Location: Stock Bay Address: 860 Sopp Road, Mojave
Latitude: 34.9359 Longtitude:-118.1439

USCS	Material Description
SM	**0-20":** Silty Sand, light brown, dry, porous, loose
SM	**20"-3.7 feet:** Silty Sand with minor caliche, light brown to tan, slightly moist, dense
SM	**3.7-5.75 feet:** Silty coarse Sand, dark brown, slightly moist, dense
SM	**5.75-10 feet:** Silty Sand with minor caliche, dark brown to tan, moist, very dense
	TD=10 feet

Log of Exploratory Test Pit

Project Name: Pacific Steel Group
Job Number: 21G-0089
Equipment: Northwest Excavating
Logged By: HHL Elevation:

Test Pit Number: 4 Date: May 11, 2021
Location: Rolling Mill 860 Sopp Road, Mojave
Latitude: 34.935368 Longtitude: -118.145157

USCS	Material Description
SM	**0-30" Topsoil:** Silty Sand, light brown, dry, loose, porous.
SM	**30"-5.5 feet:** Silty Sand with caliche, light brown to tan, slightly moist, medium dense
SM	**5.5-9 feet:** Silty coarse Sand, light brown,slightly moist, medium dense
SM	**9-10 feet:** Silty Sand with caliche, dark brown to tan, moist,very dense
	TD=10 feet

Log of Exploratory Test Pit

Project Name: Pacific Steel Group
Job Number: 21G-0089
Equipment: Northwest Excavating
Logged By: HHL Elevation:

Test Pit Number: 5 Date: May , 2021
Location: 860 Sopp Road, Mojave
Latitude: 34.934702 Longtitude:-118.145165

USCS	Material Description
SM to ML	**0-2.5 feet:** Silty Sand,light brown, dry, loose, porous.
SM	**2.5-5.4 feet:** Silty Sand with caliche, light brown to tan, slightly moist, dense
SM	**5.4-10 feet:** Silty Sand with caliche, dark brown to tan, moist, very dense
	TD= 10 feet

Log of Exploratory Test Pit

Project Name: Pacific Steel Group
Job Number: 21G-0089
Equipment: Northwest Excavating
Logged By: HHL Elevation:

Test Pit Number: 6 Date: May 11, 2021
Location: 860 Sopp Road, Mojave
Latitude: 34.934098 Longtitude:-118.144619

USCS	Material Description
SM	**0-2 feet:** Silty Sand, light brown, dry, loose to medium dense
SM	**2-4 feet:** Silty Sand, light brown, slightly moist, medium dense
SM	**4-6.5 feet:** Silty Sand with caliche, light brown to tan, slightly moist, dense
SM	**6.5-10 feet:**Silty Sand with caliche, dark brown to tan, moist, very dense
	TD= 10 feet

Log of Exploratory Test Pit

Project Name: Pacific Steel Group
Job Number: 21G-0089
Equipment: Northwest Excavating
Logged By: HHL Elevation:

Test Pit Number: 7 Date: May 11, 2021
Location: 860 Sopp Road, Mojave
Latitude: 34.933467 Longtitude: -118.144706

USCS	Material Description
SM	**0-1 feet:** Silty Sand, light brown, slightly moist, porous, loose to medium dense
SM	**1-3 feet:** Silty Sand, light brown, slightly moist, medium dense
SM	**3-7 feet:** Silty Sand with caliche, dark brown to tan, slightly moist, very dense
SM	**7-10 feet:** Silty Sand with caliche, light brown to tan, moist, very dense
	TD= 10 feet

Log of Exploratory Test Pit

Project Name: Pacific Steel Group
Job Number: 21G-0089
Equipment: Northwest Excavating
Logged By: HHL Elevation:

Test Pit Number: 8 Date: May 11, 2021
Location: Scrap Building 860 Sopp Road, Mojave
Latitude: 34.3932982 Longtitude:-118.144621

USCS	Material Description
SM	**0-1 feet:** Silty Sand, light brown, dry, loose to medium dense
SM	**1-3 feet:** Silty Sand, dark brown, slightly moist, medium dense to dense
SM	**3-6 feet:** Silty Sand with cemented sand and gravel i.e. caliche, dark brown to tan, dense to very dense
SM	**6-10 feet:** Silty Sand with minor caliche, dark brown, moist, very dense
	TD= 10 feet

Log of Exploratory Test Pit

Project Name: Pacific Steel Group
Job Number: 21G-0089
Equipment: Northwest Excavating
Logged By: HHL Elevation:

Test Pit Number: 9 Date: May 11, 2021
Location: Warehouse/Vehicle Maintenance 860 Sopp Road, Mojave
Latitude: 34.933873 Longtitude: -118.144220

USCS	Material Description
SM to ML	**0-1.3 feet:** Silty Sand, light brown, dry, loose to medium dense
SM	**1.3-3.9 feet:** Silty Sand, light brown to tan, slightly moist, medium dense to dense
SM	**3.9-8 feet:** Silty Sand with cemented sand and gravel i.e. caliche, dark brown to tan, slightly moist, dense
SM	**8-10 feet:** Silty Sand with minor caliche, dark brown to tan, moist, very dense
	TD= 10 feet

Log of Exploratory Test Pit

Project Name: Pacific Steel Group
Job Number: 21G-0089
Equipment: Northwest Excavating
Logged By: HHL Elevation:

Test Pit Number: 10 Date: May 11, 2021
Location: Bag House 860 Sopp Road, Mojave
Latitude: 34.932327 Longtitude: -118.143371

USCS	Material Description
SM	**0-8":** Silty Sand, light brown, dry, loose
SM	**8-17":** Silty Sand, light brown, slightly moist, medium dense
SM	**17"-10 feet:** Silty Sand, light brown to tan,moist, dense to very dense **TD= 10 feet**

Log of Exploratory Test Pit

Project Name: Pacific Steel Group
Job Number: 21G-0089
Equipment: Northwest Excavating
Logged By: HHL Elevation: 2561'

Test Pit Number: 11 Date: May 11, 2021
Location: Employee Parking 860 Sopp Road, Mojave
Latitude: 34.936606 Longtitude:-118.147586

USCS	Material Description
SM	**0-16" Topsoil:** Silty Sand, light brown, dry, loose, porpus
SM	**16"- 3.3 feet:** Silty Sand with minor gravels, dark brown, moist, medium dense
SM	**3.3-10 feet:** Silty Sand, light brown to tan,slightly moist, dense to very dense **TD=10 feet**

Log of Exploratory Test Pit

Project Name: Pacific Steel Group
Job Number: 21G-0089
Equipment: Northwest Excavating
Logged By: HHL Elevation: 2556'

Test Pit Number: 12 Date: May 11, 2021
Location: Tralier Parking 860 Sopp Road, Mojave
Latitude: 34.937717 Longtitude:-118.145031

USCS	Material Description
SM	**0-10":** Silty Sand with caliche fragments, light brown to white, dry, loose, porous
SM	**10"-3 feet:** Silty Sand with caliche (c.s.g.),light brown to tan, slightly moist to moist, very dense
SM	**3-5.5 feet:**Silty Sand with minor caliche,light brown to tan, slightly moist, very dense
SM	**5.5-10 feet:** Silty Sand, light brown to tan,moist, dense to very dense
	TD = 10 feet

Log of Exploratory Test Pit

Project Name:	Pacific Steel Group		Test Pit Number:	13	Date: May 11, 2021
Job Number:	21G-0089		Location:	Field Column Yard	860 Sopp Road, Mojave
Equipment:	Northwest Excavating		Latitude:	34.936635	Longtitude:-118.142617
Logged By:	HHL	Elevation: 2548'			

USCS	Material Description
SM	**0-16":** Silty Sand with roots and rootlet structures in upper 8", light brown, dry, loose-medium dense, porous
SM	**16"-5 feet:** Silty Sand with caliche (c.s.g.),light brown to tan, slightly moist to moist, very dense
SM	**5.0-10 feet:** Silty Sand, light brown to tan,moist, dense to very dense
	TD= 10 feet

Log of Exploratory Test Pit

Project Name: Pacific Steel Group
Job Number: 21G-0089
Equipment: Northwest Excavating
Logged By: HHL Elevation: 2544'

Test Pit Number: 14 Date: May 12, 2021
Location: Truck Staging Area 860 Sopp Road, Mojave
Latitude: 34.935668 Longtitude:-118.141544

USCS	Material Description
SM	**0-12" Topsoil:** Silty Sand, light brown to medium brown, dry, loose to medium dense, slightly porous
SM	**12"-2.3 feet Alluvium (Qal):** Silty Sand with cemented sand and gravel, light brown to tan, slightly moist, intact, dense
SM	**2.3-10 feet:** Silty Sand, dark brown to tan, slightly moist, very dense
	TD= 10 feet

Log of Exploratory Test Pit

Project Name: Pacific Steel Group
Job Number: 21G-0089
Equipment: Northwest Excavating
Logged By: HHL Elevation:

Test Pit Number: 15 Date: May 11, 2021
Location: 860 Sopp Road, Mojave
Latitude: 34.935106 Longtitude: -118.141896

USCS	Material Description
SM	**0-2.75 feet:** Silty Sand, medium to gray brown, rootlets and roots in upper foot, dry, very porous, loose, mottled with abundant caliche nodules
SM	**2.75-4.75 feet:** Silty Sand, medium gray to brown, upper 6" (2.75-3.25') layer of medium sand, loose, dry
SM	**4.75-5.75 feet:** Silty coarse to medium Sand, gray to light brown, no caliche, dry to slightly moist, medium dense
ML	**5.75-10 feet:** Sandy Silt with minor clay, medium gray/green to brown, slightly moist, medium dense, low porosity.
	TD= 10 feet

Log of Exploratory Test Pit

Project Name: Pacific Steel Group
Job Number: 21G-0089
Equipment: Northwest Excavating
Logged By: HHL Elevation: 2545'

Test Pit Number: 16 Date: May 12, 2021
Location: Settlement Pond 860 Sopp Road, Mojave
Latitude: 34.935111 Longtitude:-118.141410

USCS	Material Description
SM to ML	**0-12":** Silty Sand to Sandy Silt, medium gray brown, dry, highly porous, loose
SM	**12"- 4.7 feet :** Silty Sand with abundant caliche, medium gray brown to white, porous, medium dense to dense
SM	**4.7-10 feet:** Silty Sand with minor caliche, light brown, slightly moist, dense to very dense
	TD = 10 feet

Log of Exploratory Test Pit

Project Name: Pacific Steel Group
Job Number: 21G-0089
Equipment: Northwest Excavating
Logged By: HHL Elevation: 2547'

Test Pit Number: 17 Date: May 12, 2021
Location: Settlement Pond 860 Sopp Road, Mojave
Latitude: 34.934480 Longtitude:-118.141878

USCS	Material Description
SM to ML	**0-1.5 feet:** Silty Sand to Sandy Silt with caliche, medium gray brown, dry, roots and rootlets, loose to medium dense, porus
SM	**1.5-5 feet:** Silty medium Sand to Sandy Silt, minor rootlets, sandier lenses, porus, gray brown, dry to slightly moist, medium dense to dense
SM	**5-6.5 feet:** Silty medium Sand with abundant caliche, gray brown, slightly moist, dense
SM	**6.5-10 feet:** Silty medium to coarse Sand, gray medium brown, slightly moist, dense
	TD = 10 feet

Log of Exploratory Test Pit

Project Name: Pacific Steel Group
Job Number: 21G-0089
Equipment: Northwest Excavating
Logged By: HHL Elevation: 2548'

Test Pit Number: 18 Date: May , 2021
Location: Settlement Pond 860 Sopp Road, Mojave
Latitude: 34.934469 Longtitude:-118.141408

USCS	Material Description
SM	**0-12" Topsoil:** Silty Sand, light brown, dry, loose, porous, rootlets and vegetation in upper 10"
SM	**12"-4.2 feet :** Silty Sand with abundant caliche, light brown mottled with white and gray, dry, slightly porous, medium dense to dense
SM	**4.2-10 feet:** Silty Sand with minor caliche, light brown mottled with white and gray, slightly moist, very dense **TD = 10 feet**

Log of Exploratory Test Pit

Project Name: Pacific Steel Group
Job Number: 21G-0089
Equipment: Northwest Excavating
Logged By: HHL Elevation: 2551'

Test Pit Number: 19 Date: May 11, 2021
Location: Solar Panel 860 Sopp Road, Mojave
Latitude: 34.931939 Longtitude:-118.141456

USCS	Material Description
SM to ML	**0-6":** Silty Sand, light brown, dry, loose, porous, roots and vegetation
SM	**6"-1.3 feet:** Silty Sand, light brown, slightly moist, loose to medium dense
SM	**1.3-5 feet:** Silty Sand with caliche, light brown to tan brown, slightly moist, medium dense
SM	**5-10 feet:** Silty Sand with minor caliche, light brown mottled with white and gray, slightly moist, medium dense to very dense
	TD = 10 feet

Log of Exploratory Test Pit

Project Name: Pacific Steel Group
Job Number: 21G-0089
Equipment: Northwest Excavating
Logged By: HHL Elevation: 2554'

Test Pit Number: 20 Date: May 13, 2021
Location: Settlement Pond 860 Sopp Road, Mojave
Latitude: 34.934460 Longtitude: -11 -118.14569

USCS	Material Description
SM	**0-8":** Silty Sand, light brown, dry, loose, porous, roots and vegetation in upper 10"
SM	**8-2.2 feet:** Silty Sand,light brown, slightly moist, medium dense to dense
SM	**2.2-5.6 feet:** Silty Sand with C.S.G i.e. caliche, light brown mottled with white and gray, slightly moist, medium dense to dense
SM	**5.6-10 feet:** Silty Sand with C.S.G i.e. caliche, dark brown, slightly moist, medium dense to dense
	TD = 10 feet

Log of Exploratory Test Pit

Project Name: Pacific Steel Group
Job Number: 21G-0089
Equipment: Northwest Excavating
Logged By: HHL Elevation: 2558

Test Pit Number: 21 Date: May , 2021
Location: Septic Field 860 Sopp Road, Mojave
Latitude: 34.934229 Longtitude: -118.146713

USCS	Material Description
SM to ML	**0-20":** Silty Sand, light brown, dry, loose to medium dense, porous, roots and vegetation in upper 10"
SM	**20"-5.1 feet:** Silty Sand with abundant caliche, light brown mottled with white and gray, dry, medium dense to dense
SP	**5.1-6.5 feet:** medium to coarse Sand layer, dark brown, slightly moist, dense
SM	**6.5-10 feet:** Silty Sand with minor caliche, dark brown mottled with white and gray, slightly moist, very dense
	TD= 10 feet

Log of Exploratory Test Pit

Project Name: Pacific Steel Group
Job Number: 21G-0089
Equipment: Northwest Excavating
Logged By: HHL Elevation: 2557

Test Pit Number: 22 Date: May 13, 2021
Location: Septic Field 860 Sopp Road, Mojave
Latitude: 34.934506 Longtitude:-118.146963

USCS	Material Description
SM to ML	**0-16":** Silty Sand, light brown, dry, loose, porous, roots and vegetation in upper 10"
SM	**16"-3.6 feet:** Silty Sand with sparse caliche, dark brown, slightly moist, medium dense: Sand layer @ 44"
SM	**3.6-10 feet:** Silty Sand with minor caliche,dark brown, slightly moist, medium dense to dense
	TD = 10 feet

Log of Exploratory Test Pit

Project Name: Pacific Steel Group
Job Number: 21G-0089
Equipment: Northwest Excavating
Logged By: HHL Elevation: 2558

Test Pit Number: 23 Date: May , 2021
Location: Septic Field 860 Sopp Road, Mojave
Latitude: 34.934213 Longtitude:-118.146959

USCS	Material Description
SM to ML	**0-12":** Silty Sand, light brown, dry, loose, porous, roots and vegetation in upper 10"
SM	**12"-5.5 feet:** Silty Sand with C.S.G i.e. caliche, light brown mottled with white and gray, slightly moist, medium dense to dense
SM	**5.5-10 feet:** Silty Sand, light brown, moist, dense to very dense **TD = 10 feet**

Log of Exploratory Test Pit

Project Name: Pacific Steel Group
Job Number: 21G-0089
Equipment: Northwest Excavating
Logged By: HHL Elevation: 2557'

Test Pit Number: 24 Date: May 13, 2021
Location: Septic Field 860 Sopp Road, Mojave
Latitude:34.934511 Longtitude:-118.146685

USCS	Material Description
SM to ML	**0-10":** Silty Sand, light brown mottled with white, dry, loose, porous, roots and vegetation in upper 10"
SM	**10"-5.4 feet:** Silty Sand interbedded with caliche, slightly moist, medium dense to dense
SM	**5.4-10 feet:** Silty Sand, dark to medium brown, slightly moist, medium dense **TD = 10 feet**

Log of Exploratory Test Pit

Project Name: Pacific Steel Group
Job Number: 21G-0089
Equipment: Northwest Excavating
Logged By: HHL Elevation: 2560'

Test Pit Number: 25 Date: May 13, 2021
Location: Solar Panel 860 Sopp Road, Mojave
Latitude: 34.934798 Longtitude:-118.148426

USCS	Material Description
SM to ML	**0-16":**Silty Sand, light brown, dry, loose, porous, roots and vegetation in upper 10"
SM	**16"-5.3 feet:**Silty Sand with C.S.G i.e. caliche, light brown mottled with white and gray, slightly moist, medium dense to dense
SM	**5.3-10 feet:** Silty Sand with sparse caliche, light brown, slightly moist, dense to very dense **TD = 10 feet**

Log of Exploratory Test Pit

Project Name: Pacific Steel Group
Job Number: 21G-0089
Equipment: Northwest Excavating
Logged By: HHL Elevation: 2559

Test Pit Number: 26 Date: May 12, 2021
Location: Solar Panel 860 Sopp Road, Mojave
Latitude: 34.932724 Longtitude:-118.147277

USCS	Material Description
SM to ML	**0-22":** Silty Sand to Sandy Silt, light brown, dry, loose, porous, roots and vegetation in upper 10"
SM	**22"-3.75 feet:**Silty Sand with minor caliche, light brown mottled with white and gray, slightly moist, medium dense to dense
SM	**3.75-10 feet:** Silty medium sand, light brown, dry, medium dense to very dense **TD = 10 feet**

Log of Exploratory Test Pit

Project Name: Pacific Steel Group
Job Number: 21G-0089
Equipment: Northwest Excavating
Logged By: HHL Elevation: 2562

Test Pit Number: 27 Date: May 12, 2021
Location: Solar Panel 860 Sopp Road, Mojave
Latitude: 34.931305 Longtitude:-118.148515

USCS	Material Description
SM to ML	**0-24":** Silty Sand, light brown, dry, loose, porous, roots and vegetation in upper 12"
SM	**24"-5.25 feet:** Silty Sand with C.S.G i.e. caliche, light brown mottled with white and gray, slightly moist, medium dense to dense
SM	**5.2 5-10 feet:** Silty Sand, light brown, slightly moist, dense to very dense **TD = 10 feet**

Log of Exploratory Test Pit

Project Name: Pacific Steel Group
Job Number: 21G-0089
Equipment: Northwest Excavating
Logged By: HHL Elevation: 2561

Test Pit Number: 28 Date: May , 2021
Location: Solar Panel 860 Sopp Road, Mojave
Latitude: 34.930925 Longtitude:-118.147148

USCS	Material Description
SM to ML	**0-20":** Silty Sand to Sandy Silt, light brown, dry, loose, porous, roots and vegetation in upper 10"
SM	**2-3.75 feet:** Silty Sand with minor caliche, light brown mottled with white and gray, slightly moist, medium dense to dense
SM	**3.75-10 feet:** Silty Sand, light brown, slightly moist, dense
	TD = 10 feet

Log of Exploratory Test Pit

Project Name: Pacific Steel Group
Job Number: 21G-0089
Equipment: Northwest Excavating
Logged By: HHL Elevation: 2554

Test Pit Number: 29 Date: May 12, 2021
Location: Solar Panel 860 Sopp Road, Mojave
Latitude: 34.931042 Longtitude:-118.144375

USCS	Material Description
SM to ML	**0-24":** Silty Sand to Sandy Silt, light brown, dry, slightly porous, loose
SM	**2-5 feet:**Silty Sand with C.S.G i.e. caliche, light brown mottled with white and gray, slightly moist, medium dense to dense
SM	**5-10 feet:** Silty Sand with minor caliche, dark brown mottled with white and gray, slightly moist, very dense
	TD = 10 feet

Log of Exploratory Test Pit

Project Name: Pacific Steel Group
Job Number: 21G-0089
Equipment: Northwest Excavating
Logged By: HHL Elevation: 2551

Test Pit Number: 30 Date: May 12, 2021
Location: Solar Panel 860 Sopp Road, Mojave
Latitude: 34.930645 Longtitude:-118.142231

USCS	Material Description
SM	**0-12":** Silty Sand, light brown, dry, loose, porous, roots and vegetation in upper 10"
SM	**12"-3 feet:** Silty Sand with abundant caliche, light brown mottled with white and gray, dry, medium dense to dense
SM	**3-10 feet:** Silty Sand with minor caliche, light brown mottled with white and gray, slightly moist, medium dense to dense **TD= 10 feet**

Log of Exploratory Test Pit

Project Name:	Pacific Steel Group		Test Pit Number:	31	Date: May 12, 2021
Job Number:	21G-0089		Location:	Solar Panel	860 Sopp Road, Mojave
Equipment:	Northwest Excavating		Latitude:	34.928926	Longtitude:-118.144606
Logged By:	HHL	Elevation: 2556			

USCS	Material Description
SM	**0-2.9 feet:** Silty Sand, light brown, dry, loose, porous, roots and vegetation in upper 10"
SM	**2.9-5 feet:** Silty Sand with C.S.G i.e. caliche, light brown mottled with white and gray, slightly moist, medium dense to dense
SM	**5-10 feet:** Silty Sand with minor caliche, dark brown, slightly moist, medium dense to dense **TD=10 feet**

Log of Exploratory Test Pit

Project Name: Pacific Steel Group
Job Number: 21G-0089
Equipment: Northwest Excavating
Logged By: HHL Elevation: 2555

Test Pit Number: 32 Date: May 12, 2021
Location: Solar Panel 860 Sopp Road, Mojave
Latitude: 34.930071 Longtitude:-118.141370

USCS	Material Description
SM	**0-30":** Silty Sand, light brown, dry, loose to medium dense, porous, scattered roots and vegetation at surface
SM	**30"-5.4 feet:** Silty Sand with minor caliche nodules, light brown to tan, slightly moist, medium dense to dense
SM	**5.4-10 feet:** Silty Sand with minor caliche nodules, dark brown to tan, slightly moist, very dense
	TD= 10 feet

APPENDIX B

INFILTRATION TESTING DATA REDUCTION
DOUBLE-RING INFILTRATION AND RYON'S METHOD INFILTRATION

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GEOTECHNICAL CONSULTANTS

DOUBLE-RING INFILTRATION TEST RESULTS

			Area	Depth of Liq
Project ID	21G-0089-0	Constants	(cm^2)	(cm)
Test Location	TP-16	Inner Ring	707	15.24
Tested By	MRM	Anlr. Space	2106	15.24
Date	5/12/21	Weather:	Clear, Windy	
Tube Set	1			

Test No.	Start or End	Date M/D/Y	Time Hr:Min	Interval Elapsed (min)	Flow Readings				Incr. Infiltration Rate		Incr. Infiltration Rate		Air Temperature
					Inner Ring		Annular Space						
					Reading	Flow	Reading	Flow	Inner	Annular	Inner	Annular	
					(mm)	(cm^3)	(mm)	(cm^3)	(cm/hr)	(cm/hr)	(in/hr)	(in/hr)	
1	Start	2/5/21	9:48	10	1,214	6,736	1,270	20,739	57.2	59.1	22.5	23.3	73
	End	2/5/21	9:58		140		140						
2	Start	2/5/21	10:01	10	1,105	5,813	1,265	18,596	49.3	53.0	19.4	20.9	75
	End	2/5/21	10:11		178		251						
3	Start	2/5/21	10:15	10	1,214	5,223	1,265	18,549	44.3	52.8	17.5	20.8	79
	End	2/5/21	10:25		381		254						
4	Start	2/5/21	10:29	10	1,229	4,873	1,295	22,604	41.4	64.4	16.3	25.4	80
	End	2/5/21	10:39		452		64						
5	Start	2/5/21	10:44	10	1,232	4,539	1,240	17,850	38.5	50.9	15.2	20.0	82
	End	2/5/21	10:54		508		267						
6	Start	2/5/21	11:00	10	1,257	3,902	1,283	14,774	33.1	42.1	13.0	16.6	82
	End	2/5/21	11:10		635		478						
7	Start	2/5/21	11:03	10	1,209	2,819	1,283	14,215	23.9	40.5	9.4	15.9	84
	End	2/5/21	11:13		759		508						
8	Start	2/5/21	11:17	10	1,207	2,070	1,209	13,236	17.6	37.7	6.9	14.8	84
	End	2/5/21	11:27		876		488						

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GEOTECHNICAL CONSULTANTS

DOUBLE-RING INFILTRATION TEST RESULTS

			Area	Depth of Liq
Project ID	21G-0089-0	Constants	(cm^2)	(cm)
Test Location	TP-17	Inner Ring	707	15.24
Tested By	HHL	Anlr. Space	2106	15.24
Date	5/12/21	Weather:	Clear, Windy	
Tube Set	2			

Test No.	Start or End	Date M/D/Y	Time Hr:Min	Interval Elapsed (min)	Flow Readings				Incr. Infiltration Rate		Incr. Infiltration Rate		Air Temperature
					Inner Ring		Annular Space						
					Reading	Flow	Reading	Flow	Inner	Annular	Inner	Annular	
					(mm)	(cm^3)	(mm)	(cm^3)	(cm/hr)	(cm/hr)	(in/hr)	(in/hr)	
1	Start	2/5/21	9:31	10	1,214	6,042	940	15,343	51.3	43.7	20.2	17.2	72
	End	2/5/21	9:41		257		107						
2	Start	2/5/21	9:45	10	1,105	5,817	927	13,706	49.4	39.0	19.4	15.4	75
	End	2/5/21	9:55		183		183						
3	Start	2/5/21	10:00	10	1,214	4,631	937	13,752	39.3	39.2	15.5	15.4	79
	End	2/5/21	10:10		480		191						
4	Start	2/5/21	10:13	10	1,229	3,413	988	17,308	29.0	49.3	11.4	19.4	80
	End	2/5/21	10:23		688		48						
5	Start	2/5/21	10:28	10	1,232	4,102	919	13,238	34.8	37.7	13.7	14.8	80
	End	2/5/21	10:38		582		201						
6	Start	2/5/21	10:42	10	1,257	3,301	942	10,759	28.0	30.7	11.0	12.1	82
	End	2/5/21	10:52		734		358						
7	Start	2/5/21	10:55	10	1,207	2,612	942	10,338	22.2	29.5	8.7	11.6	82
	End	2/5/21	11:05		792		381						
8	Start	2/5/21	11:08	10	1,207	1,699	917	10,244	14.4	29.2	5.7	11.5	83
	End	2/5/21	11:18		937		361						

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RYON METHOD_INFILTRATION TEST RESULTS

TEST PIT 21			
Pre-Soak 5/12/20 8:38AM		Date of Test 5/13/20 12:06 PM	
Water Depth (in.)	Time (hr:min)	Elapsed Time (min.)	Time (min.) 5th to 6th inch
12	12:06		
7	12:35	29	
6	12:50	44	15

TEST PIT 22			
Pre-Soak 5/12/20		Date of Test 5/13/20	
Water Depth (in.)	Time (hr:min)	Elapsed Time (min.)	Time (min.) 5th to 6th inch
12	12:01		
7	13:05	64	
6	13:43	102	38

APPENDIX C

LABORATORY TESTS

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APPENDIX C

C-1.00 LABORATORY TESTS

C-1.01 Maximum Density

Maximum density - optimum moisture relationships for the major soil types encountered during the field exploration were performed in the laboratory using the standard procedures of ASTM D1557.

C-1.02 Moisture Determination

Moisture content of the soil samples was performed in accordance with standard method for determination of water content of soil by drying oven, ASTM D2216. The mass of material remaining after oven drying is used as the mass of the solid particles.

C-1.03 Density of Split-Barrel Samples

The density of ring and tube samples, which were obtained using a split-barrel sampler, were determined in accordance with ASTM D2937. The results of these tests are provided on the boring logs in Appendix A.

C-1.04 Resistance Value (R-Value)

Resistance Value tests were performed on representative samples of subgrade obtained from planned streets areas using test methods outlined in ASTM D2844.

C-1.05 Soluble Sulfates and Chlorides

Tests were performed on three near-surface samples encountered during the investigation using California Test Methods 417 and 422.

C-1.06 Soil Reactivity (pH) and Electrical Conductivity (Ec)

Representative soil sample was tested for soil reactivity (pH) and electrical conductivity (Ec) using California Test Method 643. The pH measurement determines the degree of acidity or alkalinity in the soils. The Ec is a measure of the electrical resistivity and is expressed as the reciprocal of the resistivity.

C-1.07 Particle Size Analysis

Particle size analysis was performed on a representative sample of the on-site soils in accordance with the standard test methods of the ASTM D422. The test results are included in this Appendix C.

C-1.08 Consolidation (One-Dimensional)

One-dimensional consolidation tests were performed using the standard test method of ASTM D2435. The test was performed on a sample that was remolded to 90% relative compaction.

The rate of consolidation of the tested sample was not determined and the applied test pressure is indicated on the summary of the test results.

C-1.09 Direct Shear

Direct shear tests were performed on undisturbed samples of the earth materials encountered in the test holes using the standard test method of ASTM D3080 (consolidated and drained). Shear tests were performed on a direct shear machine of the strain-controlled type. To simulate possible adverse field conditions, the samples were saturated prior to shearing. Samples were sheared at varying normal loads and the results plotted to establish the angle of the internal friction and cohesion of the tested samples. Graphic representations of the results are included in this section.

C-1.10 Test Results

Test results for all laboratory tests performed on the subject project are presented in this appendix. For a sample-by-sample description, see the logs presented in Appendix A.

MAXIMUM DENSITY - OPTIMUM MOISTURE

(Test Method: ASTM D1557)

Sample Number	Soil Description	Optimum Moisture (Percent)	Maximum Density (lbs/ft^3)
TP-10 @ 0-5 ft	Silty Sand with Caliche (SM)	11.2	123.5
B-3 @ 0-5 ft	Silty Sand with Caliche (SM)	10.4	123.9
B-9 @ 0-5 ft	Silty Sand with Caliche (SM)	11.0	122.7
B-13 @ 0-5 ft	Silty Sand with Caliche (SM)	8.6	129.1
B-21 @ 0-5 ft	Silty Sand with Caliche (SM)	9.9	125.4

EXPANSION TEST

Test Method: ASTM D4829

Sample Location	Expansion Index	Expansion Classification
TP3 @ 0-5 feet	0	Very Low
B3 @ 0-5 feet	2	Very Low
B9 @ 0-5 feet	4	Very Low
B13 @ 0-5 feet	0	Very Low
B36 @ 0-5 feet	27	Very Low

'R' VALUE CA 301

Client: RMA Geoscience Date: 7/9/21 By: LD

Client's Job No.: **21G0089** Sample No.: B-29

GLA Reference: 2015-0118 Soil Type: Brown, Sandy Clay

TEST SPECIMEN		A	B	C	D
Compactor Air Pressure	psi	**100**	**65**	**200**	
Initial Moisture Content	%	**6.0**	**6.0**	**6.0**	
Water Added	ml	**100**	**120**	**85**	
Moisture at Compaction	%	15.7	17.6	14.2	
Sample & Mold Weight	gms	**3179**	**3170**	**3192**	
Mold Weight	gms	**2095**	**2094**	**2096**	
Net Sample Weight	gms	1084	1076	1096	
Sample Height	in.	**2.476**	**2.45**	**2.488**	
Dry Density	pcf	114.7	113.1	116.8	
Pressure	lbs	**4435**	**3040**	**7350**	
Exudation Pressure	psi	353	242	585	
Expansion Dial	x 0.0001	**32**	**15**	**49**	
Expansion Pressure	psf	139	65	212	
Ph at 1000lbs	psi	**45**	**57**	**33**	
Ph at 2000lbs	psi	**102**	**130**	**78**	
Displacement	turns	**3.56**	**4.35**	**3.39**	
R' Value		29	12	44	
Corrected 'R' Value		**29**	**12**	**44**	

FINAL 'R' VALUE	
By Exudation Pressure (@ 300 psi):	**22**
By Expansion Pressure :	**22**
TI = 5	

Geo-Logic ASSOCIATES

'R' VALUE CA 301

Client: RMA Geoscience Date: 7/9/21 By: LD

Client's Job No.: **21G0089** Sample No.: B-33

GLA Reference: 2015-0118 Soil Type: Brown, Clayey Sand

TEST SPECIMEN		A	B	C	D
Compactor Air Pressure	psi	**95**	**300**	**350**	
Initial Moisture Content	%	**4.7**	**4.7**	**4.7**	
Water Added	ml	**70**	**60**	**50**	
Moisture at Compaction	%	11.3	10.4	9.4	
Sample & Mold Weight	gms	**3262**	**3227**	**3240**	
Mold Weight	gms	**2102**	**2107**	**2103**	
Net Sample Weight	gms	1160	1120	1137	
Sample Height	in.	**2.513**	**2.428**	**2.462**	
Dry Density	pcf	125.6	126.6	127.9	
Pressure	lbs	**1835**	**3670**	**8200**	
Exudation Pressure	psi	146	292	653	
Expansion Dial	x 0.0001	**0**	**7**	**13**	
Expansion Pressure	psf	0	30	56	
Ph at 1000lbs	psi	**35**	**25**	**18**	
Ph at 2000lbs	psi	**70**	**46**	**33**	
Displacement	turns	**4.45**	**3.89**	**3.62**	
R' Value		42	61	73	
Corrected 'R' Value		**42**	**61**	**73**	

FINAL 'R' VALUE	
By Exudation Pressure (@ 300 psi):	**62**
By Expansion Pressure :	**N/A**
TI = 5	

Geo-Logic ASSOCIATES

'R' VALUE CA 301

Client: RMA Geoscience Date: 7/9/21 By: LD

Client's Job No.: **21G0089** Sample No.: B-27

GLA Reference: 2015-0118 Soil Type: Brown, Sandy Clay

TEST SPECIMEN		A	B	C	D
Compactor Air Pressure	psi	**70**	**110**	**180**	
Initial Moisture Content	%	**4.1**	**4.1**	**4.1**	
Water Added	ml	**110**	**90**	**70**	
Moisture at Compaction	%	14.5	12.6	10.7	
Sample & Mold Weight	gms	**3225**	**3235**	**3236**	
Mold Weight	gms	**2104**	**2115**	**2099**	
Net Sample Weight	gms	1121	1120	1137	
Sample Height	in.	**2.51**	**2.475**	**2.502**	
Dry Density	pcf	118.2	121.7	124.3	
Pressure	lbs	**2030**	**5005**	**7730**	
Exudation Pressure	psi	162	398	615	
Expansion Dial	x 0.0001	**5**	**29**	**43**	
Expansion Pressure	psf	22	126	186	
Ph at 1000lbs	psi	**63**	**36**	**24**	
Ph at 2000lbs	psi	**133**	**62**	**41**	
Displacement	turns	**4.41**	**3.99**	**3.62**	
R' Value		10	50	67	
Corrected 'R' Value		**10**	**50**	**67**	

FINAL 'R' VALUE	
By Exudation Pressure (@ 300 psi):	**36**
By Expansion Pressure :	**37**
TI = 5	

Geo-Logic ASSOCIATES

'R' VALUE CA 301

Client: RMA Geoscience Date: 7/9/21 By: LD

Client's Job No.: **21G0089** Sample No.: B-23

GLA Reference: 2015-0118 Soil Type: Brown, Sandy Clay

TEST SPECIMEN		A	B	C	D
Compactor Air Pressure	psi	**80**	**65**	**175**	
Initial Moisture Content	%	**3.8**	**3.8**	**3.8**	
Water Added	ml	**100**	**115**	**85**	
Moisture at Compaction	%	13.2	14.6	11.8	
Sample & Mold Weight	gms	**3246**	**3283**	**3251**	
Mold Weight	gms	**2075**	**2102**	**2099**	
Net Sample Weight	gms	1171	1181	1152	
Sample Height	in.	**2.515**	**2.54**	**2.48**	
Dry Density	pcf	124.6	122.9	125.9	
Pressure	lbs	**4065**	**2200**	**7340**	
Exudation Pressure	psi	324	175	584	
Expansion Dial	x 0.0001	**11**	**0**	**22**	
Expansion Pressure	psf	48	0	95	
Ph at 1000lbs	psi	**38**	**60**	**27**	
Ph at 2000lbs	psi	**80**	**136**	**52**	
Displacement	turns	**4.01**	**4.54**	**3.71**	
R' Value		38	9	58	
Corrected 'R' Value		**38**	**9**	**58**	

FINAL 'R' VALUE	
By Exudation Pressure (@ 300 psi):	**34**
By Expansion Pressure :	**48**
TI = 5	

Geo-Logic ASSOCIATES

SAMPLE NO.:	B-3	B-13	B-27	B-33	B-36	
Depth:	0 - 5'	0 - 5'	0 - 5'	0 - 5'	0 - 5'	
DIRECT SHEAR TEST (type)						
Initial Moisture Content %						
Dry Density (pcf)						
Normal Stress (psf)						
Peak Shear Stress (psf)						
Ultimate Shear Stress (psf)						
Cohesion (psf)						
Internal Friction Angle (degrees)						
EXPANSION TEST UBC STD 18-2						
Initial Dry Density (pcf)						
Initial Moisture Content %						
Final Moisture Content %						
Pressure (psf)						
Expansion Index / Swell %						
CORROSIVITY TEST						
Resistivity (CTM643) (ohm-cm)	1260	3000	<500	1300	2100	
pH (CTM643)	7.6	7.3	6.9	7.2	7.4	
CHEMICAL TESTS						
Soluble Sulfate (CTM 417) (ppm)	222	202	4065	440	194	
Chloride Content (CTM 422) (ppm)	86	27	395	202	42	
Wash #200 Sieve (ASTM-1140) %						
Sand Equivalent (ASTM D2419)						

SAMPLE NO.:	T-3	T-5	T-8	T-10		
Depth:	0 - 6'	0 - 6'	0 - 6'	0 - 6'		
DIRECT SHEAR TEST (type)						
Initial Moisture Content %						
Dry Density (pcf)						
Normal Stress (psf)						
Peak Shear Stress (psf)						
Ultimate Shear Stress (psf)						
Cohesion (psf)						
Internal Friction Angle (degrees)						
EXPANSION TEST UBC STD 18-2						
Initial Dry Density (pcf)						
Initial Moisture Content %						
Final Moisture Content %						
Pressure (psf)						
Expansion Index / Swell %						
CORROSIVITY TEST						
Resistivity (CTM643) (ohm-cm)	3600	5400	9100	3700		
pH (CTM643)	7.2	7.4	7.3	7.4		
CHEMICAL TESTS						
Soluble Sulfate (CTM 417) (ppm)	259	185	242	271		
Chloride Content (CTM 422) (ppm)	79	47	57	39		
Wash #200 Sieve (ASTM-1140) %						
Sand Equivalent (ASTM D2419)						

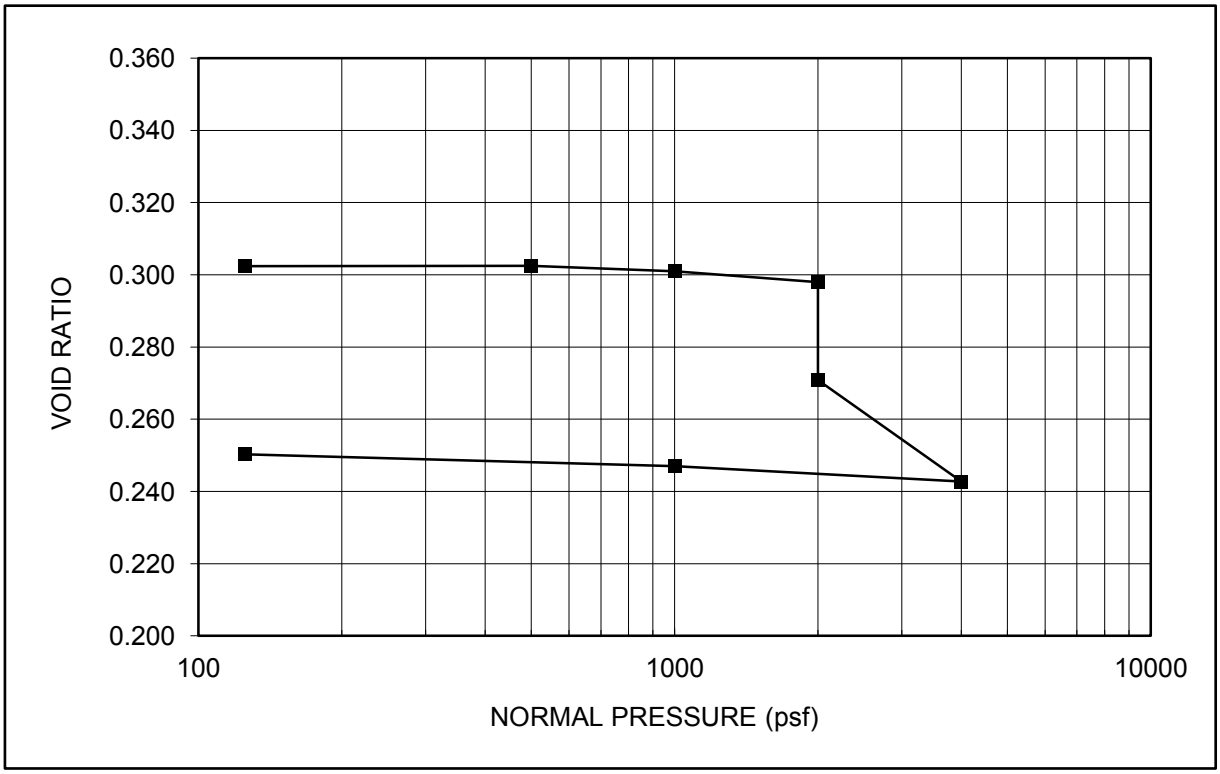
RMA GeoScience

ONE-DIMENSIONAL CONSOLIDATION
ASTM D2435

Project ID: 21G-0089-0
Location: B1
Depth: 5 feet
Soil Description: Light Grey Bown Silty Sand

Dry Unit Weight (pcf):	127.0	Initial Dial Reading:	0.2500	inch
Initial Moisture:	4.4%	Initial Specimen Height:	1.0000	inch
Final Moisture:	11.2%	Initial Void Ratio:	0.302	
Initial Saturation:	38.6%	Final Void Ratio:	0.247	
Final Saturation:	99.4%	Specific Gravity :	2.65	

Moisture Condition	Load (psf)	Final Dial Reading (inches)	Sample Height (inches)	Void Ratio	Strain (%)	ΔStrain (%)
In Situ	125	0.2500	1.0000	0.302	0.00	0.00
	500	0.2499	1.0001	0.303	-0.01	-0.01
	1000	0.2511	0.9989	0.301	0.11	0.12
	2000	0.2534	0.9966	0.298	0.34	0.23
Add water	2000	0.2742	0.9758	0.271	2.42	2.08
	4000	0.2958	0.9542	0.243	4.58	2.16
	1000	0.2925	0.9575	0.247	4.25	-0.33
	125	0.2900	0.9600	0.250	4.00	-0.25



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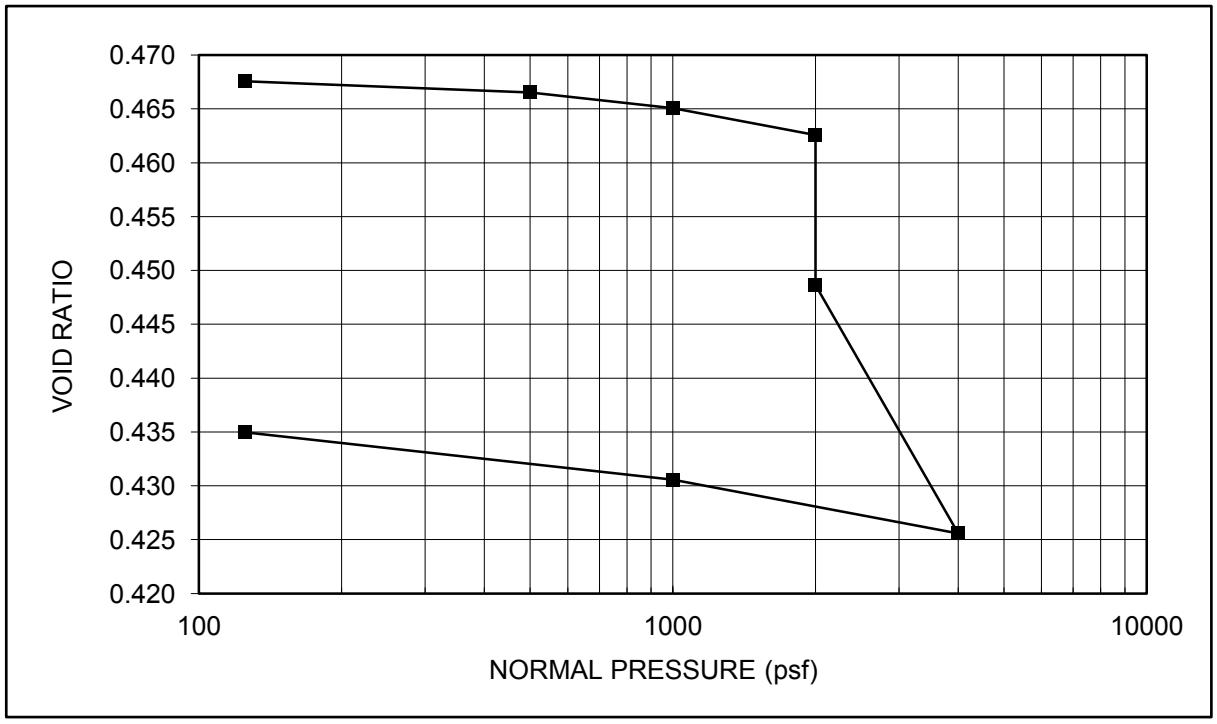
ONE-DIMENSIONAL CONSOLIDATION
ASTM D2435

Project ID: 21G-0089-0
Location: B1
Depth: 15 feet
Soil Description: Silty Sand Sand trace gravel and caliche

Dry Unit Weight (pcf): 112.7
Initial Moisture: 3.6%
Final Moisture: 11.6%
Initial Saturation: 20.4%
Final Saturation: 99.8%

Initial Dial Reading: 0.2500 inch
Initial Specimen Height: 1.0000 inch
Initial Void Ratio: 0.467
Final Void Ratio: 0.431
Specific Gravity : 2.65

Moisture Condition	Load (psf)	Final Dial Reading (inches)	Sample Height (inches)	Void Ratio	Strain (%)	ΔStrain (%)
In Situ	125	0.2498	1.0002	0.468	-0.02	-0.02
	500	0.2505	0.9995	0.467	0.05	0.07
	1000	0.2515	0.9985	0.465	0.15	0.10
	2000	0.2532	0.9968	0.463	0.32	0.17
Add water	2000	0.2627	0.9873	0.449	1.27	0.95
	4000	0.2784	0.9716	0.426	2.84	1.57
	1000	0.2750	0.9750	0.431	2.50	-0.34
	125	0.2720	0.9780	0.435	2.20	-0.30



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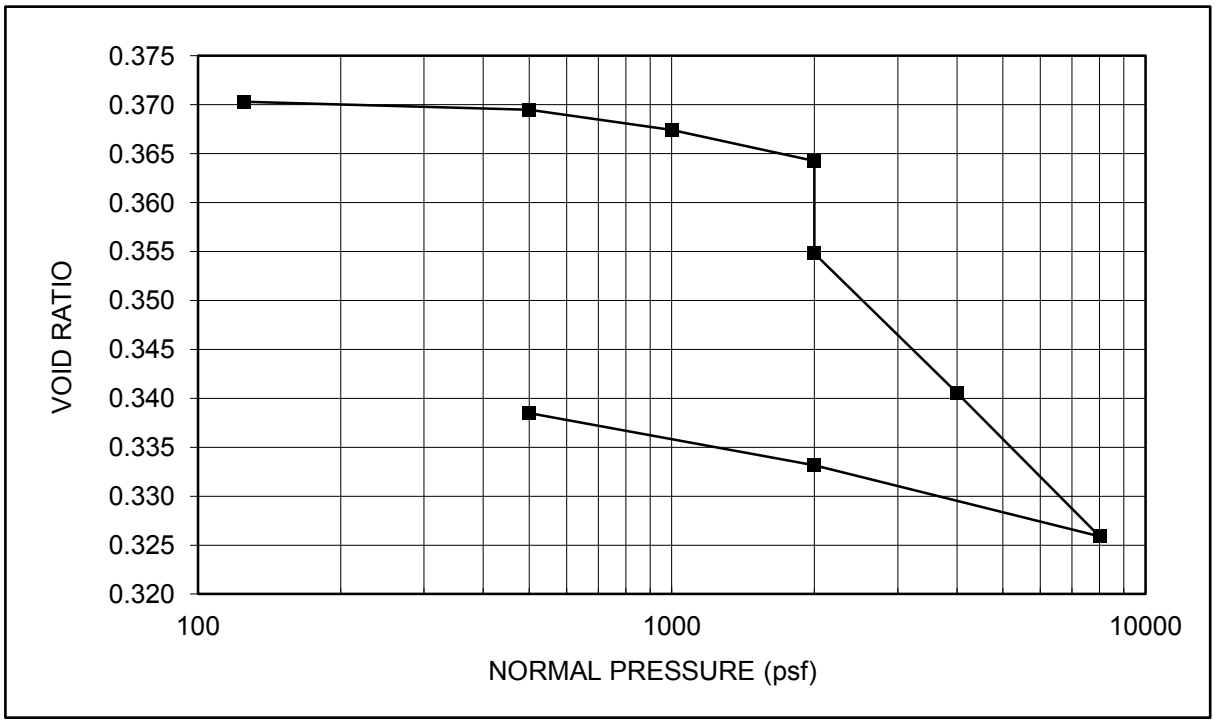
ONE-DIMENSIONAL CONSOLIDATION
ASTM D2435

Project ID: 21G-0089-0
Location: B4
Depth: 5 feet
Soil Description: Silty Sand

Dry Unit Weight (pcf): 120.7
Initial Moisture: 4.2%
Final Moisture: 10.1%
Initial Saturation: 30.1%
Final Saturation: 99.8%

Initial Dial Reading: 0.2500 inch
Initial Specimen Height: 1.0000 inch
Initial Void Ratio: 0.370
Final Void Ratio: 0.326
Specific Gravity : 2.65

Moisture Condition	Load (psf)	Final Dial Reading (inches)	Sample Height (inches)	Void Ratio	Strain (%)	ΔStrain (%)
In Situ	125	0.2498	1.0002	0.370	-0.02	-0.02
	500	0.2504	0.9996	0.369	0.04	0.06
	1000	0.2519	0.9981	0.367	0.19	0.15
	2000	0.2542	0.9958	0.364	0.42	0.23
Add water	2000	0.2611	0.9889	0.355	1.11	0.69
	4000	0.2715	0.9785	0.341	2.15	1.04
	8000	0.2822	0.9678	0.326	3.22	1.07
	2000	0.2769	0.9731	0.333	2.69	-0.53
	500	0.2730	0.9770	0.338	2.30	-0.39



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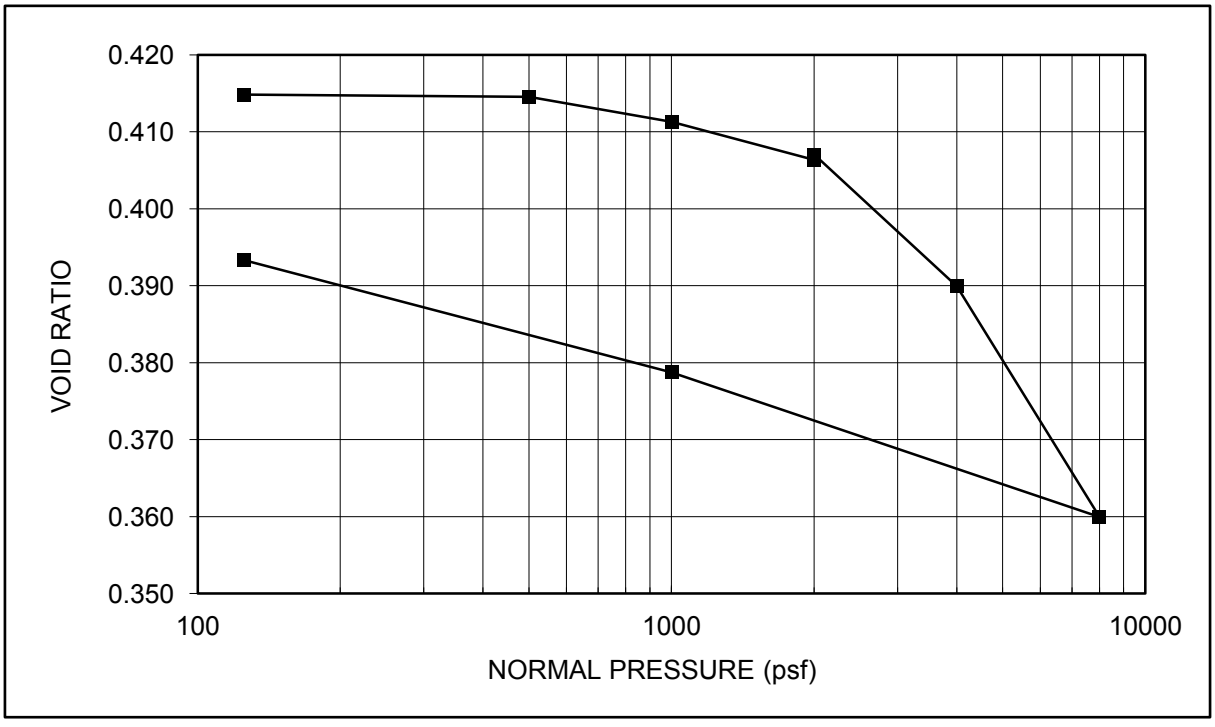
ONE-DIMENSIONAL CONSOLIDATION
ASTM D2435

Project ID: 21G-0089-0
Location: B4
Depth: 25 feet
Soil Description: Grey Brown Silty Sand

Dry Unit Weight (pcf): 116.9
Initial Moisture: 9.6%
Final Moisture: 13.3%
Initial Saturation: 61.3%
Final Saturation: 99.5%

Initial Dial Reading: 0.2500 inch
Initial Specimen Height: 1.0000 inch
Initial Void Ratio: 0.415
Final Void Ratio: 0.360
Specific Gravity : 2.65

Moisture Condition	Load (psf)	Final Dial Reading (inches)	Sample Height (inches)	Void Ratio	Strain (%)	ΔStrain (%)
In Situ	125	0.2498	1.0002	0.415	-0.02	-0.02
	500	0.2500	1.0000	0.415	0.00	0.02
	1000	0.2523	0.9977	0.411	0.23	0.23
	2000	0.2558	0.9942	0.406	0.58	0.35
Add water	2000	0.2553	0.9947	0.407	0.53	-0.05
	4000	0.2674	0.9826	0.390	1.74	1.21
	8000	0.2886	0.9614	0.360	3.86	2.12
	1000	0.2753	0.9747	0.379	2.53	-1.33
	125	0.2650	0.9850	0.393	1.50	-1.03



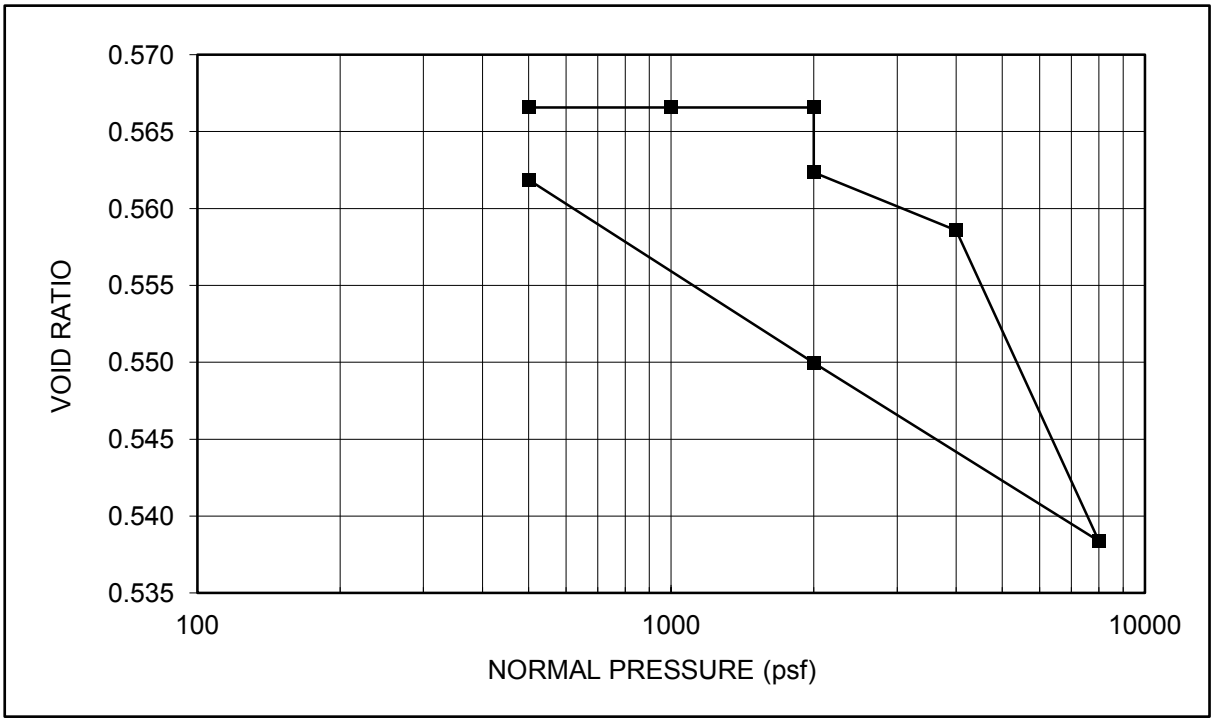
ONE-DIMENSIONAL CONSOLIDATION
ASTM D2435

Project ID: 21G-0089-0
Location: B4
Depth: 45 feet
Soil Description: Clayey Sand

Dry Unit Weight (pcf): 106.8
Initial Moisture: 23.4%
Final Moisture: 18.8%
Initial Saturation: 110.7%
Final Saturation: 99.8%

Initial Dial Reading: 0.2500 inch
Initial Specimen Height: 1.0000 inch
Initial Void Ratio: 0.567
Final Void Ratio: 0.538
Specific Gravity : 2.68

Moisture Condition	Load (psf)	Final Dial Reading (inches)	Sample Height (inches)	Void Ratio	Strain (%)	ΔStrain (%)
In Situ	125	0.2500	1.0000	0.567	0.00	0.00
	500	0.2500	1.0000	0.567	0.00	0.00
	1000	0.2500	1.0000	0.567	0.00	0.00
	2000	0.2500	1.0000	0.567	0.00	0.00
Add water	2000	0.2527	0.9973	0.562	0.27	0.27
	4000	0.2551	0.9949	0.559	0.51	0.24
	8000	0.2680	0.9820	0.538	1.80	1.29
	2000	0.2606	0.9894	0.550	1.06	-0.74
	500	0.2530	0.9970	0.562	0.30	-0.76



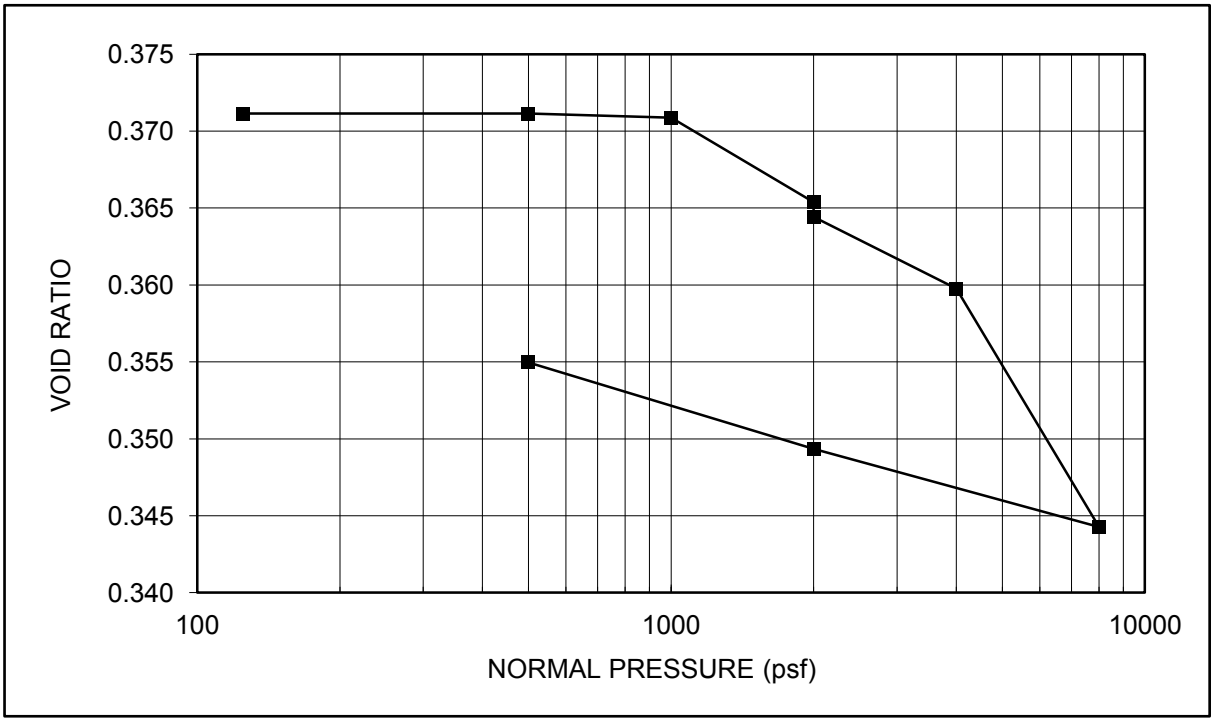
RMA GeoScience

ONE-DIMENSIONAL CONSOLIDATION
ASTM D2435

Project ID: 21G-0089-0
Location: B8
Depth: 10 feet
Soil Description: Gray Tan Silty Sand

Dry Unit Weight (pcf):	120.6		Initial Dial Reading:	0.2500	inch
Initial Moisture:	3.1%		Initial Specimen Height:	1.0000	inch
Final Moisture:	11.0%		Initial Void Ratio:	0.371	
Initial Saturation:	22.3%		Final Void Ratio:	0.344	
Final Saturation:	99.9%		Specific Gravity :	2.65	

Moisture Condition	Load (psf)	Final Dial Reading (inches)	Sample Height (inches)	Void Ratio	Strain (%)	ΔStrain (%)
In Situ	125	0.2500	1.0000	0.371	0.00	0.00
	500	0.2500	1.0000	0.371	0.00	0.00
	1000	0.2502	0.9998	0.371	0.02	0.02
	2000	0.2542	0.9958	0.365	0.42	0.40
Add water	2000	0.2549	0.9951	0.364	0.49	0.07
	4000	0.2583	0.9917	0.360	0.83	0.34
	8000	0.2696	0.9804	0.344	1.96	1.13
	2000	0.2659	0.9841	0.349	1.59	-0.37
	500	0.2618	0.9882	0.355	1.18	-0.41



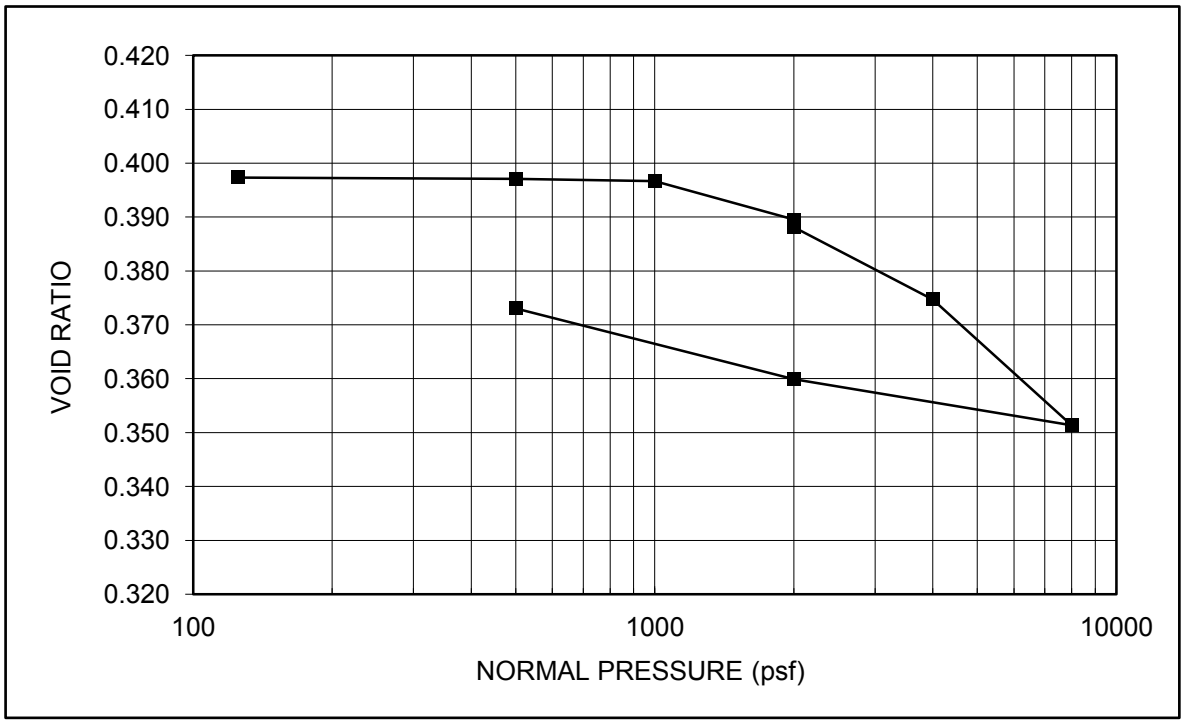
RMA GeoScience

ONE-DIMENSIONAL CONSOLIDATION
ASTM D2435

Project ID: 21G-0089-0
Location: B8
Depth: 30 feet
Soil Description: Light Gray Silty Sand

Dry Unit Weight (pcf):	118.3		Initial Dial Reading:	0.2500	inch
Initial Moisture:	9.5%		Initial Specimen Height:	1.0000	inch
Final Moisture:	14.6%		Initial Void Ratio:	0.398	
Initial Saturation:	63.0%		Final Void Ratio:	0.351	
Final Saturation:	100.0%		Specific Gravity :	2.65	

Moisture Condition	Load (psf)	Final Dial Reading (inches)	Sample Height (inches)	Void Ratio	Strain (%)	ΔStrain (%)
In Situ	125	0.2502	0.9998	0.397	0.02	0.02
	500	0.2504	0.9996	0.397	0.04	0.02
	1000	0.2507	0.9993	0.397	0.07	0.03
	2000	0.2558	0.9942	0.390	0.58	0.51
Add water	2000	0.2568	0.9932	0.388	0.68	0.10
	4000	0.2664	0.9836	0.375	1.64	0.96
	8000	0.2831	0.9669	0.351	3.31	1.67
	2000	0.2770	0.9730	0.360	2.70	-0.61
	500	0.2676	0.9824	0.373	1.76	-0.94



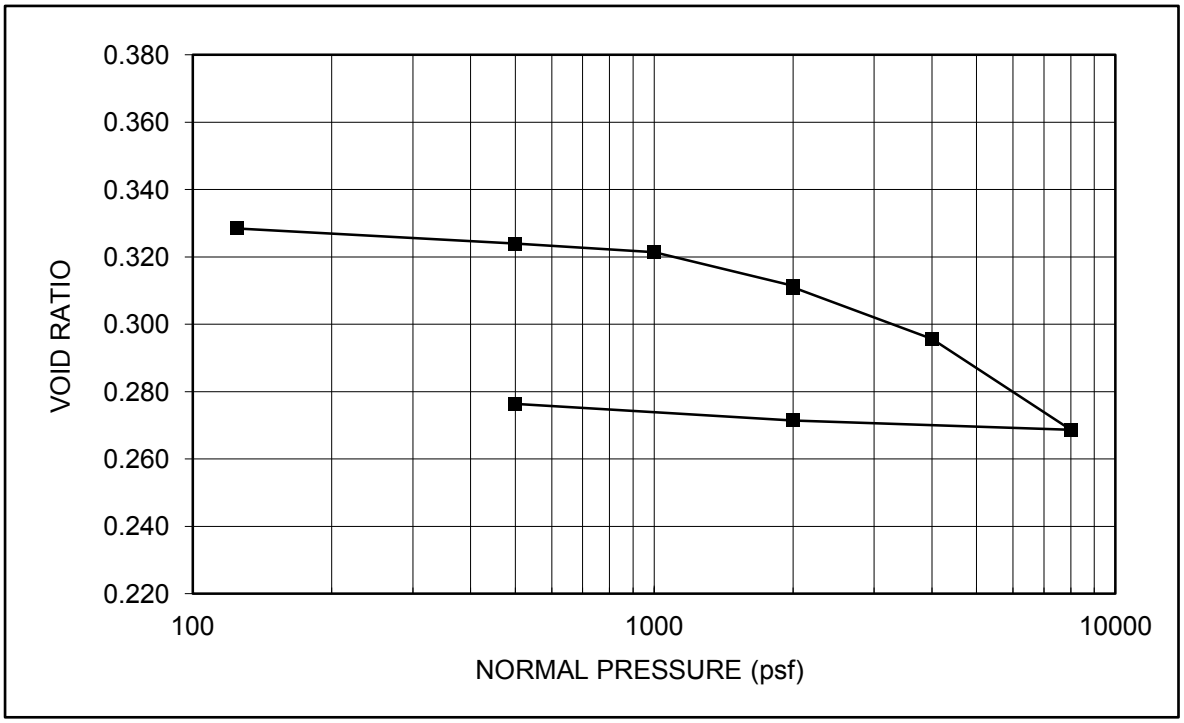
RMA GeoScience

ONE-DIMENSIONAL CONSOLIDATION
ASTM D2435

Project ID: 21G-0089-0
Location: B8
Depth: 40 feet
Soil Description: Tan Brown Silty Sand

Dry Unit Weight (pcf):	124.4		Initial Dial Reading:	0.2500	inch
Initial Moisture:	5.6%		Initial Specimen Height:	1.0000	inch
Final Moisture:	12.4%		Initial Void Ratio:	0.329	
Initial Saturation:	45.1%		Final Void Ratio:	0.269	
Final Saturation:	99.8%		Specific Gravity :	2.65	

Moisture Condition	Load (psf)	Final Dial Reading (inches)	Sample Height (inches)	Void Ratio	Strain (%)	ΔStrain (%)
In Situ	125	0.2506	0.9994	0.328	0.06	0.06
	500	0.2540	0.9960	0.324	0.40	0.34
	1000	0.2559	0.9941	0.321	0.59	0.19
	2000	0.2634	0.9866	0.311	1.34	0.75
Add water	2000	0.2638	0.9862	0.311	1.38	0.04
	4000	0.2753	0.9747	0.296	2.53	1.15
	8000	0.2956	0.9544	0.269	4.56	2.03
	2000	0.2935	0.9565	0.271	4.35	-0.21
	500	0.2898	0.9602	0.276	3.98	-0.37

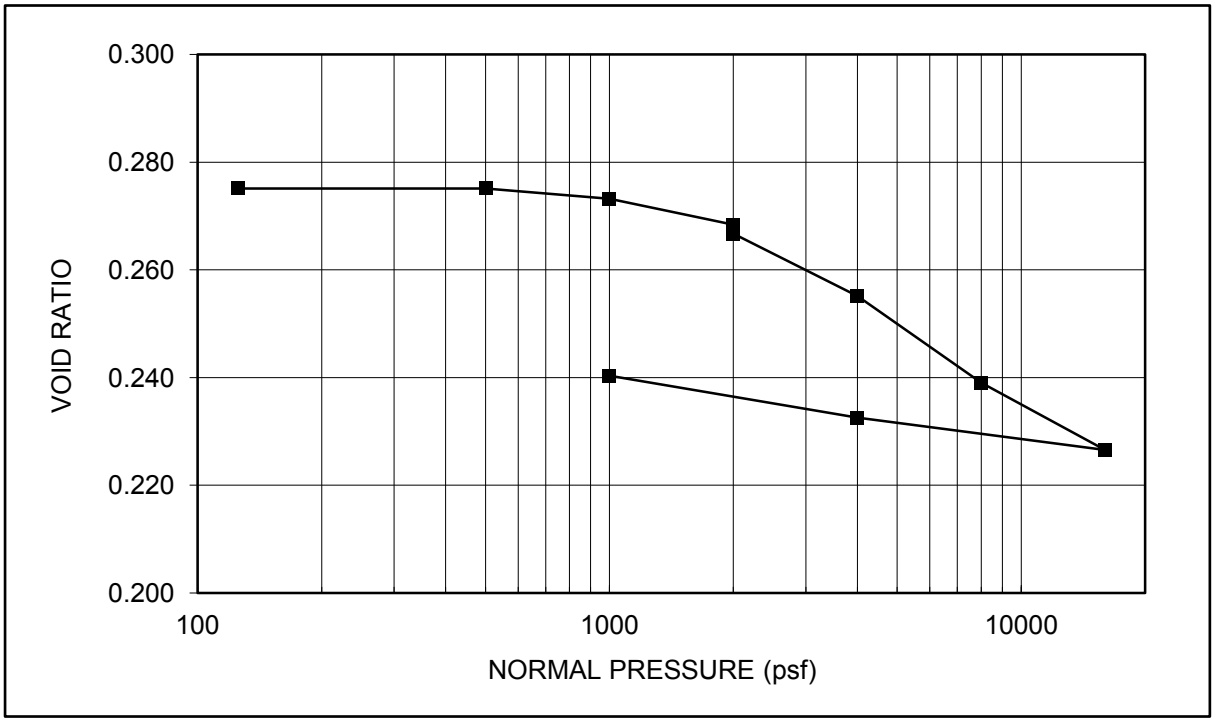


ONE-DIMENSIONAL CONSOLIDATION
ASTM D2435

Project ID: 21G-0089-0
Location: B10
Depth: 5 feet
Soil Description: Tan Brown Silty Sand

Dry Unit Weight (pcf):	129.7		Initial Dial Reading:	0.2500	inch
Initial Moisture:	4.8%		Initial Specimen Height:	1.0000	inch
Final Moisture:	8.7%		Initial Void Ratio:	0.274	
Initial Saturation:	46.2%		Final Void Ratio:	0.239	
Final Saturation:	99.3%		Specific Gravity :	2.65	

Moisture Condition	Load (psf)	Final Dial Reading (inches)	Sample Height (inches)	Void Ratio	Strain (%)	ΔStrain (%)
In Situ	125	0.2495	1.0005	0.275	-0.05	-0.05
	500	0.2495	1.0005	0.275	-0.05	0.00
	1000	0.2510	0.9990	0.273	0.10	0.15
	2000	0.2548	0.9952	0.268	0.48	0.38
Add water	2000	0.2561	0.9939	0.267	0.61	0.13
	4000	0.2652	0.9848	0.255	1.52	0.91
	8000	0.2778	0.9722	0.239	2.78	1.26
	16000	0.2876	0.9624	0.227	3.76	0.98
	4000	0.2829	0.9671	0.233	3.29	-0.47
	1000	0.2768	0.9732	0.240	2.68	-0.61



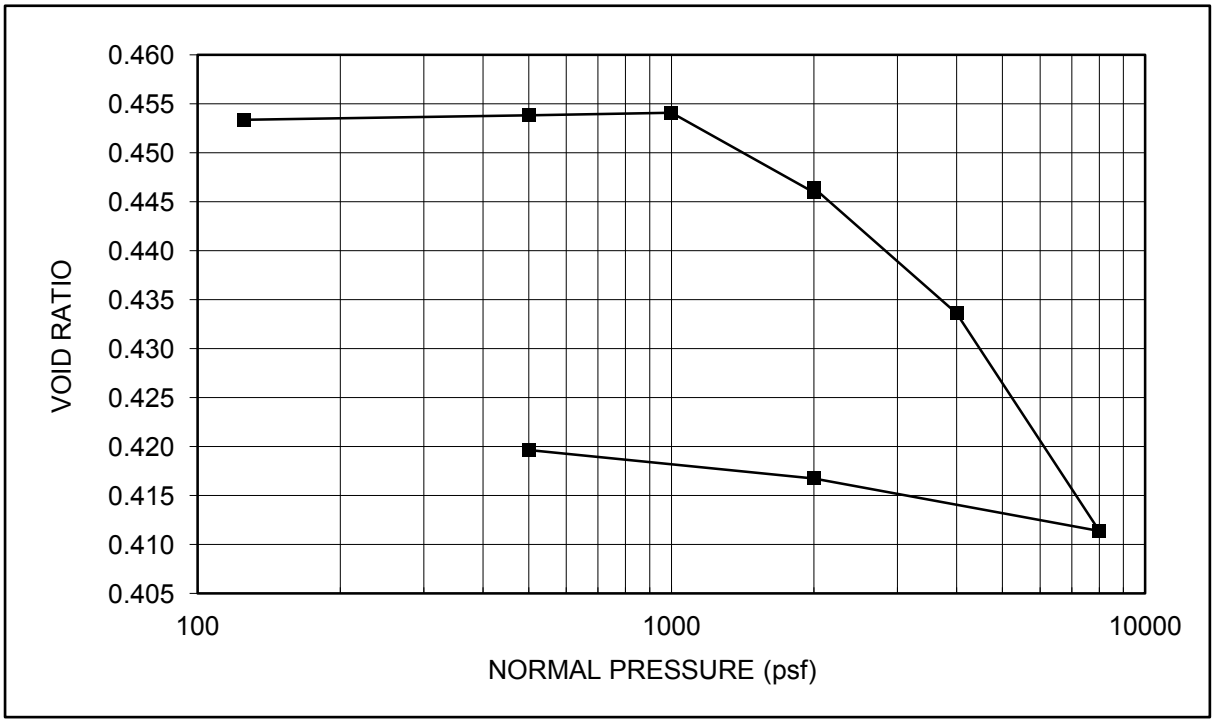
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ONE-DIMENSIONAL CONSOLIDATION
ASTM D2435

Project ID: 21G-0089-0
Location: B10
Depth: 30 feet
Soil Description: Red Tan Brown Silty Sand

Dry Unit Weight (pcf):	113.8	Initial Dial Reading:	0.2500	inch
Initial Moisture:	13.3%	Initial Specimen Height:	1.0000	inch
Final Moisture:	17.0%	Initial Void Ratio:	0.453	
Initial Saturation:	77.8%	Final Void Ratio:	0.411	
Final Saturation:	100.0%	Specific Gravity :	2.65	

Moisture Condition	Load (psf)	Final Dial Reading (inches)	Sample Height (inches)	Void Ratio	Strain (%)	ΔStrain (%)
In Situ	125	0.2498	1.0002	0.453	-0.02	-0.02
	500	0.2495	1.0005	0.454	-0.05	-0.03
	1000	0.2493	1.0007	0.454	-0.07	-0.02
	2000	0.2549	0.9951	0.446	0.49	0.56
Add water	2000	0.2546	0.9954	0.446	0.46	-0.03
	4000	0.2634	0.9866	0.434	1.34	0.88
	8000	0.2787	0.9713	0.411	2.87	1.53
	2000	0.2750	0.9750	0.417	2.50	-0.37
	500	0.2730	0.9770	0.420	2.30	-0.20

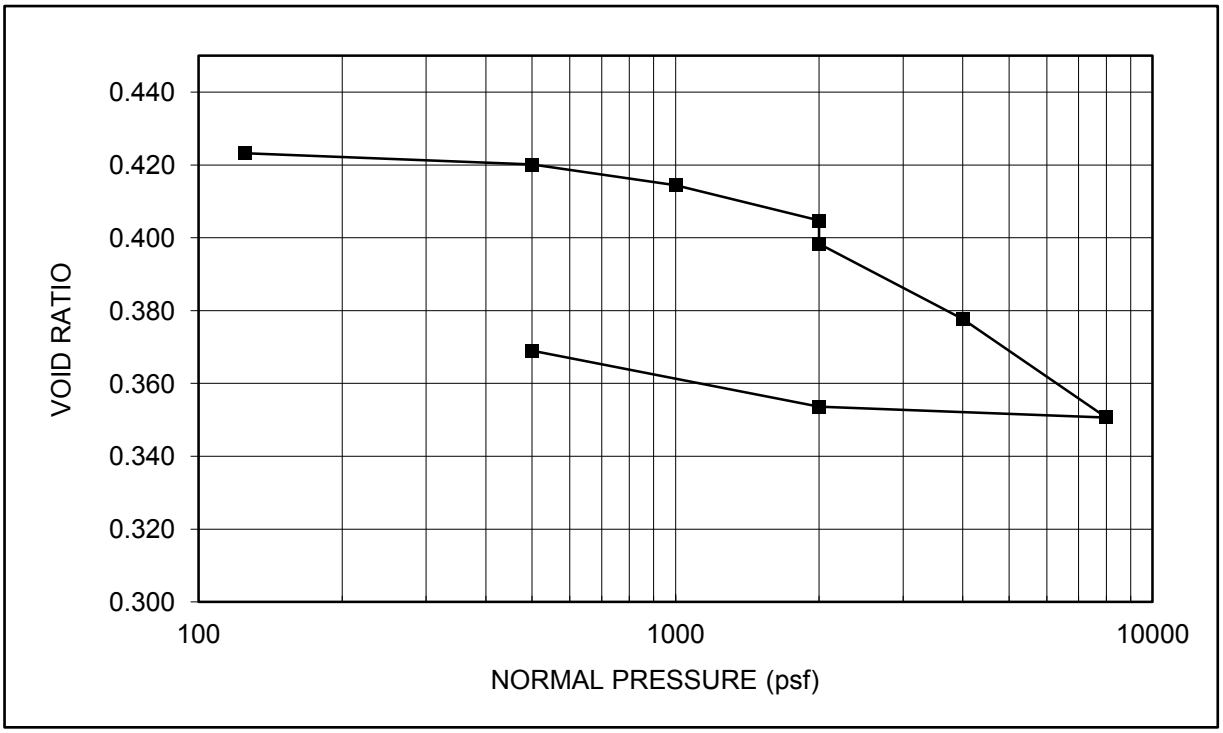


ONE-DIMENSIONAL CONSOLIDATION
ASTM D2435

Project ID: 21G-0089-0
Location: B10
Depth: 50 feet
Soil Description: Orange Brown Clay Sand

Dry Unit Weight (pcf):	117.5	Initial Dial Reading:	0.2500	inch
Initial Moisture:	10.5%	Initial Specimen Height:	1.0000	inch
Final Moisture:	12.5%	Initial Void Ratio:	0.423	
Initial Saturation:	66.5%	Final Void Ratio:	0.351	
Final Saturation:	99.4%	Specific Gravity :	2.68	

Moisture Condition	Load (psf)	Final Dial Reading (inches)	Sample Height (inches)	Void Ratio	Strain (%)	ΔStrain (%)
In Situ	125	0.2500	1.0000	0.423	0.00	0.00
	500	0.2522	0.9978	0.420	0.22	0.22
	1000	0.2562	0.9938	0.414	0.62	0.40
	2000	0.2630	0.9870	0.405	1.30	0.68
Add water	2000	0.2675	0.9825	0.398	1.75	0.45
	4000	0.2820	0.9680	0.378	3.20	1.45
	8000	0.3010	0.9490	0.351	5.10	1.90
	2000	0.2989	0.9511	0.354	4.89	-0.21
	500	0.2881	0.9619	0.369	3.81	-1.08



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DIRECT SHEAR TEST
ASTM D3080

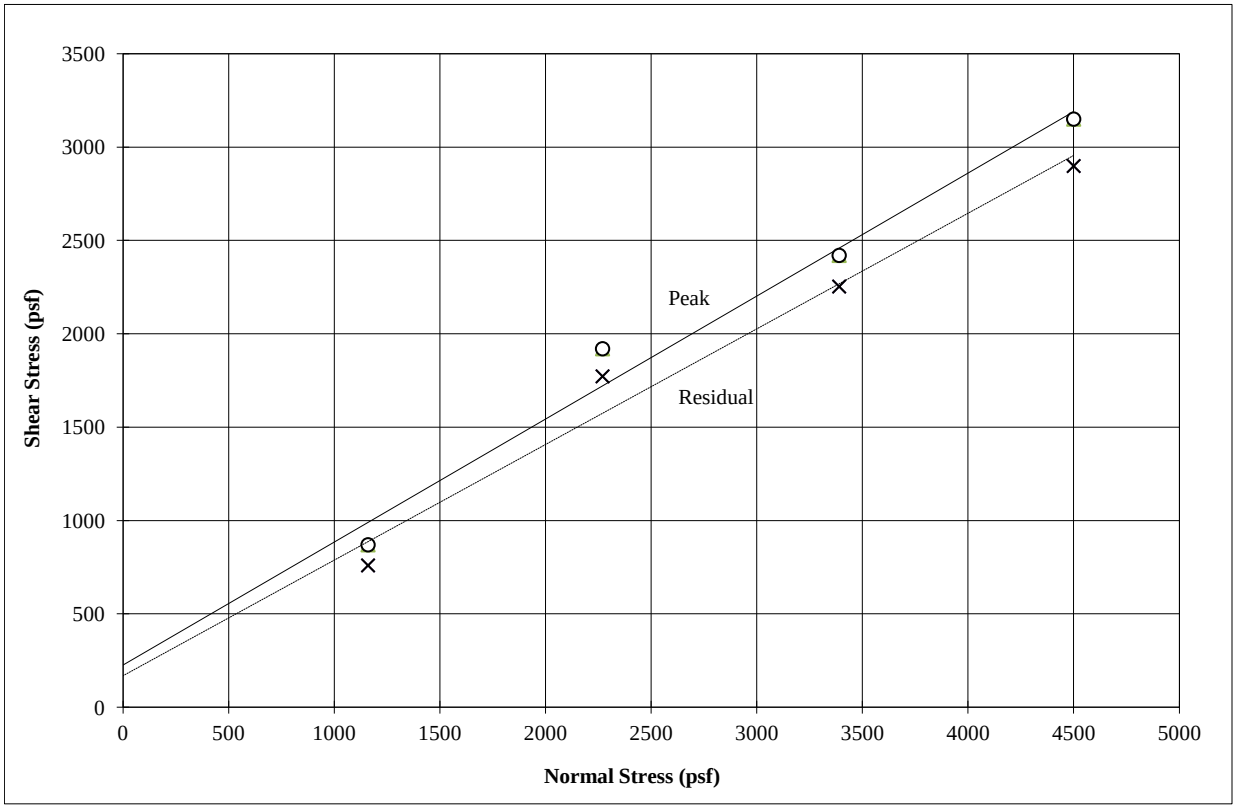
Project ID: 21G-0228-0
Location: B4
Depth: 10 feet
Soil Description: Light Gray Silty Sand

Remolded or Undisturbed: Undisturbed
Maximum Dry Density (pcf) = N/A
Optimum Moisture Content (%) = N/A
Initial Dry Density (pcf) = 112.9
Relative Compaction (%) = N/A
Initial Moisture Content (%) = 5.4%
Final Moisture Content (%) = 22.4%

Diameter (in)	2.41
Area of sample (in^2)	4.56
Load Ring Constant (lb/in)	4010

Load Applied (g)	Normal Pressure (psf)	Peak		Residual	
		Dial Reading	Shear Resist (psf)	Dial Reading	Shear Resist (psf)
16615	1160	0.0069	870	0.0060	760
32600	2270	0.0152	1920	0.0140	1772
48674	3390	0.0191	2420	0.0178	2253
64681	4500	0.0249	3150	0.0229	2899

	Peak	Residual
Cohesion (psf) =	230	170
Friction Angle (deg) =	33	32



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DIRECT SHEAR TEST
ASTM D3080

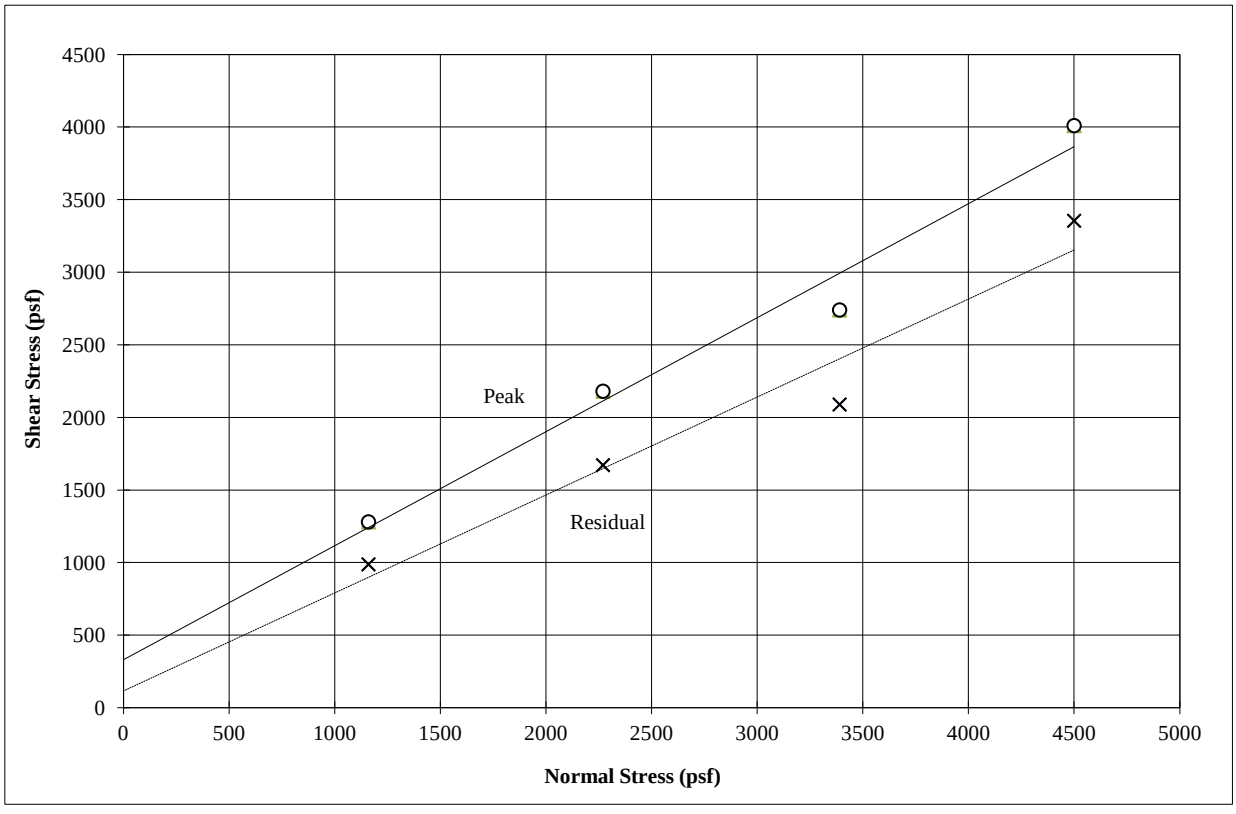
Project ID: 21G-0089-0
Location: B4
Depth: 20 feet
Soil Description: Tan Brown Silty Sand

Remolded or Undisturbed: Undisturbed
Maximum Dry Density (pcf) = N/A
Optimum Moisture Content (%) = N/A
Initial Dry Density (pcf) = 126.9
Relative Compaction (%) = N/A
Initial Moisture Content (%) = 6.9%
Final Moisture Content (%) = 20.7%

Diameter (in)	2.41
Area of sample (in^2)	4.56
Load Ring Constant (lb/in)	4010

Load Applied (g)	Normal Pressure (psf)	Peak		Residual	
		Dial Reading	Shear Resist (psf)	Dial Reading	Shear Resist (psf)
16615	1160	0.0101	1280	0.0078	987
32600	2270	0.0172	2180	0.0132	1671
48674	3390	0.0216	2740	0.0165	2089
64681	4500	0.0317	4010	0.0265	3355

	Peak	Residual
Cohesion (psf) =	330	120
Friction Angle (deg) =	38	34



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DIRECT SHEAR TEST
ASTM D3080

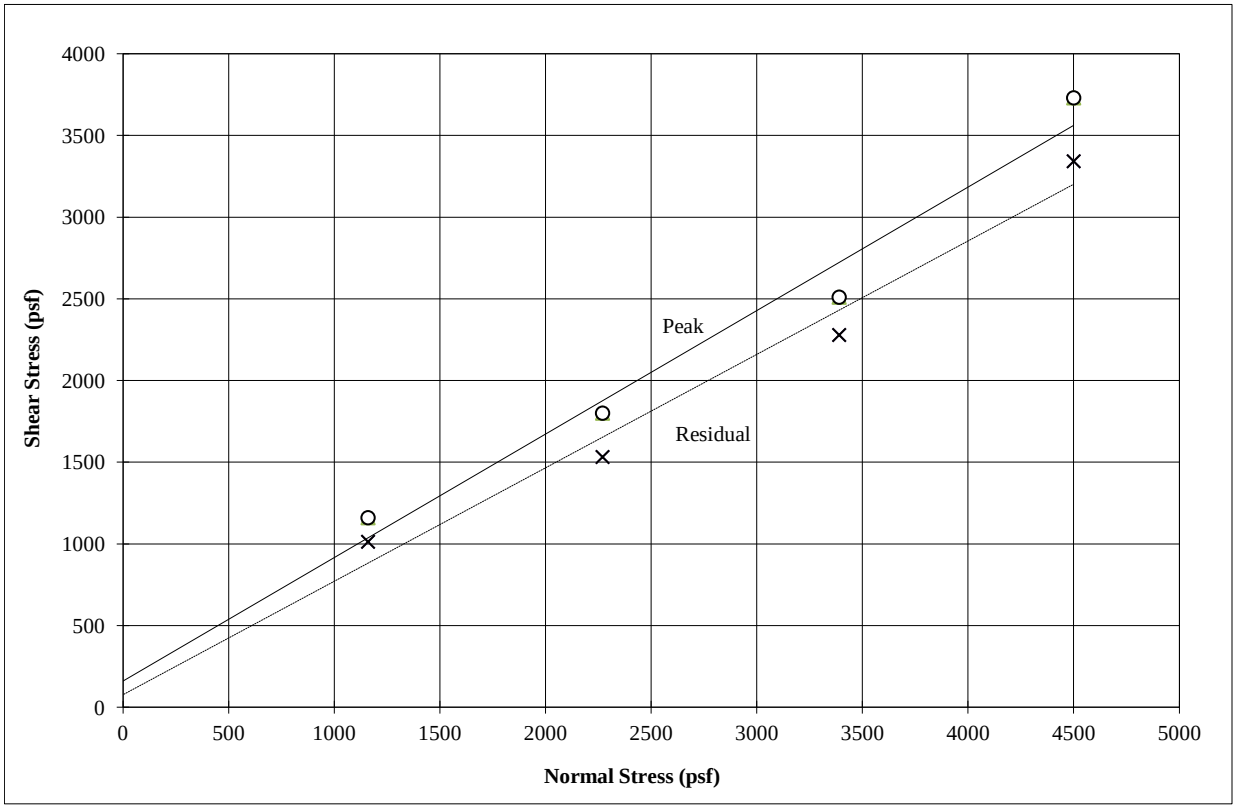
Project ID: 21G-0228-0
Location: B8
Depth: 25 feet
Soil Description: Tan Grey Silty Sand

Remolded or Undisturbed: Undisturbed
Maximum Dry Density (pcf) = N/A
Optimum Moisture Content (%) = N/A
Initial Dry Density (pcf) = 124.8
Relative Compaction (%) = N/A
Initial Moisture Content (%) = 9.5%
Final Moisture Content (%) = 21.3%

Diameter (in)	2.41
Area of sample (in^2)	4.56
Load Ring Constant (lb/in)	4010

Load Applied (g)	Normal Pressure (psf)	Peak		Residual	
		Dial Reading	Shear Resist (psf)	Dial Reading	Shear Resist (psf)
16615	1160	0.0092	1160	0.0080	1013
32600	2270	0.0142	1800	0.0121	1532
48674	3390	0.0198	2510	0.0180	2279
64681	4500	0.0295	3730	0.0264	3342

	Peak	Residual
Cohesion (psf) =	160	80
Friction Angle (deg) =	37	35



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DIRECT SHEAR TEST
ASTM D3080

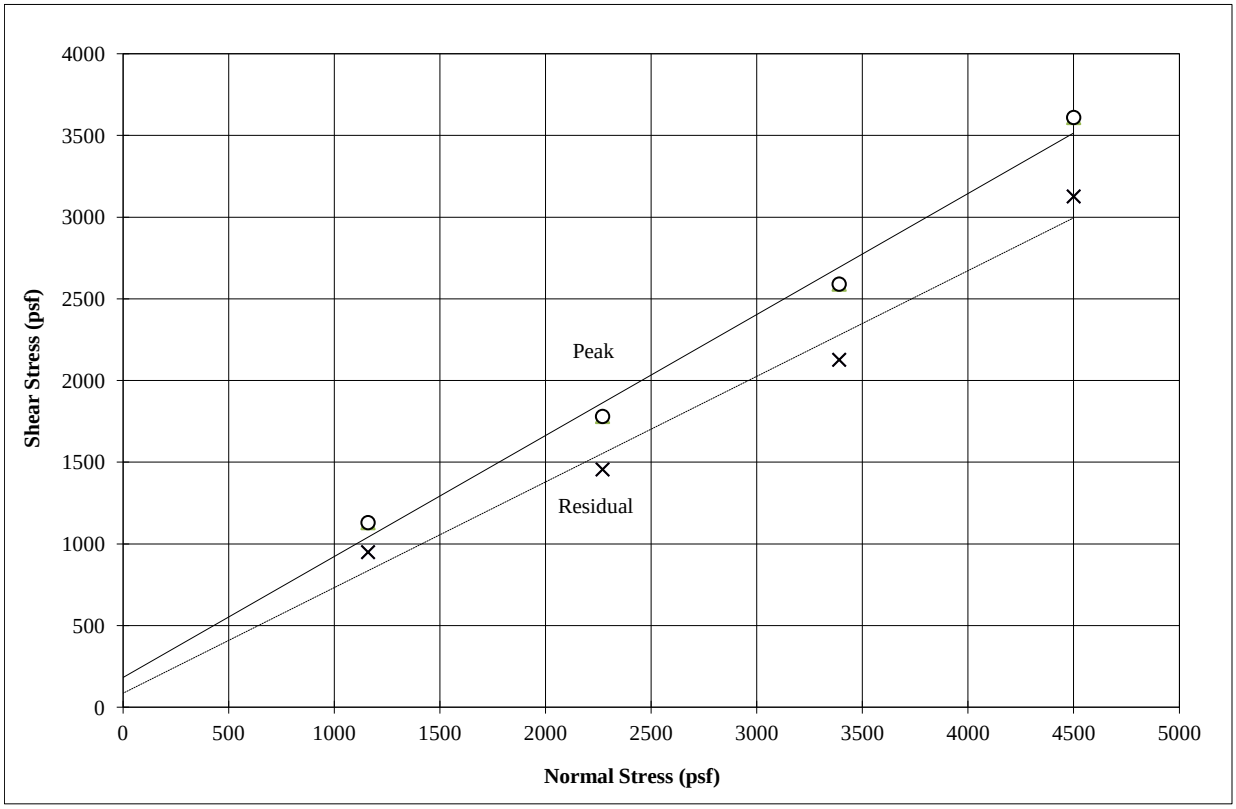
Project ID: 21G-0228-0
Location: B10
Depth: 15 feet
Soil Description: Tan Brown Silty Sand

Remolded or Undisturbed: Undisturbed
Maximum Dry Density (pcf) = N/A
Optimum Moisture Content (%) = N/A
Initial Dry Density (pcf) = 120.3
Relative Compaction (%) = N/A
Initial Moisture Content (%) = 3.8%
Final Moisture Content (%) = 26.8%

Diameter (in)	2.41
Area of sample (in^2)	4.56
Load Ring Constant (lb/in)	4010

Load Applied (g)	Normal Pressure (psf)	Peak		Residual	
		Dial Reading	Shear Resist (psf)	Dial Reading	Shear Resist (psf)
16615	1160	0.0089	1130	0.0075	949
32600	2270	0.0140	1780	0.0115	1456
48674	3390	0.0205	2590	0.0168	2127
64681	4500	0.0285	3610	0.0247	3127

	Peak	Residual
Cohesion (psf) =	180	80
Friction Angle (deg) =	37	33



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DIRECT SHEAR TEST
ASTM D3080

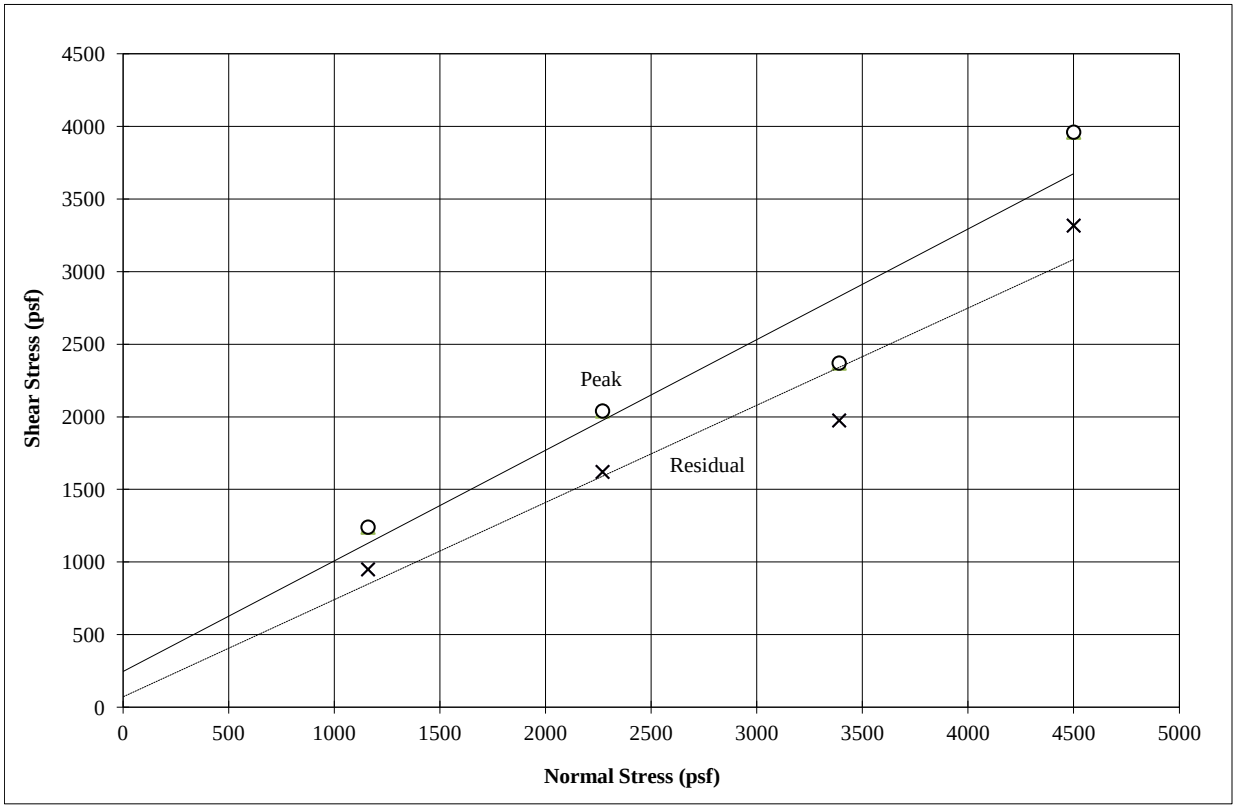
Project ID: 21G-0228-0
Location: B10
Depth: 25 feet
Soil Description: Silty Sand

Remolded or Undisturbed: Undisturbed
Maximum Dry Density (pcf) = N/A
Optimum Moisture Content (%) = N/A
Initial Dry Density (pcf) = 123.0
Relative Compaction (%) = N/A
Initial Moisture Content (%) = 6.3%
Final Moisture Content (%) = 20.3%

Diameter (in)	2.41
Area of sample (in^2)	4.56
Load Ring Constant (lb/in)	4010

Load Applied (g)	Normal Pressure (psf)	Peak		Residual	
		Dial Reading	Shear Resist (psf)	Dial Reading	Shear Resist (psf)
16615	1160	0.0098	1240	0.0075	949
32600	2270	0.0161	2040	0.0128	1620
48674	3390	0.0187	2370	0.0156	1975
64681	4500	0.0313	3960	0.0262	3317

	Peak	Residual
Cohesion (psf) =	250	70
Friction Angle (deg) =	37	34



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APPENDIX D

GENERAL EARTHWORK
AND
GRADING SPECIFICATIONS

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GENERAL EARTHWORK AND GRADING SPECIFICATIONS

D-1.00 GENERAL DESCRIPTION

D-1.01 Introduction

These specifications present our general recommendations for earthwork and grading as shown on the approved grading plans for the subject project. These specifications shall cover all clearing and grubbing, removal of existing structures, preparation of land to be filled, filling of the land, spreading, compaction and control of the fill, and all subsidiary work necessary to complete the grading of the filled areas to conform with the lines, grades and slopes as shown on the approved plans.

The recommendations contained in the geotechnical report of which these general specifications are a part of shall supersede the provisions contained hereinafter in case of conflict.

D-1.02 Laboratory Standard and Field Test Methods

The laboratory standard used to establish the maximum density and optimum moisture shall be ASTM D1557.

The in situ density of earth materials (field compaction tests) shall be determined by the sand cone method (ASTM D1556), direct transmission nuclear method (ASTM D2922) or other test methods as considered appropriate by the geotechnical consultant.

Relative compaction is defined, for purposes of these specifications, as the ratio of the in-place density to the maximum density as determined in the previously mentioned laboratory standard.

D-2.00 Clearing

D-2.01 Surface Clearing

All structures marked for removal, timber, logs, trees, brush and other rubbish shall be removed and disposed of off the site. Any trees to be removed shall be pulled in such a manner so as to remove as much of the root system as possible.

D-2.02 Subsurface Removals

A thorough search should be made for possible underground storage tanks and/or septic tanks and cesspools. If found, tanks should be removed and cesspools pumped dry.

Any concrete irrigation lines shall be crushed in place and all metal underground lines shall be removed from the site.

D-2.03 Backfill of Cavities

All cavities created or exposed during clearing and grubbing operations or by previous use of the site shall be cleared of deleterious material and backfilled with native soils or other materials approved by the soil engineer. Said backfill shall be compacted to a minimum of 90% relative compaction.

D-3.00 ORIGINAL GROUND PREPARATION

D-3.01 Stripping of Vegetation

After the site has been properly cleared, all vegetation and topsoil containing the root systems of former vegetation shall be stripped from areas to be graded. Materials removed in this stripping process may be used as fill in areas designated by the soil engineer, provided the vegetation is mixed with a sufficient amount of soil to assure that no appreciable settlement or other detriment will occur due to decaying of the organic matter. Soil materials containing more than 3% organics shall not be used as structural fill.

D-3.02 Removals of Non-Engineered Fills

Any non-engineered fills encountered during grading shall be completely removed and the underlying ground shall be prepared in accordance with the recommendations for original ground preparation contained in this section. After cleansing of any organic matter, the fill material may be used for engineered fill.

D-3.03 Overexcavation of Fill Areas

The existing ground in all areas determined to be satisfactory for the support of fills shall be scarified to a minimum depth of 6 inches. Scarification shall continue until the soils are broken down and free from lumps or clods and until the scarified zone is uniform. The moisture content of the scarified zone shall be adjusted to within 2% of optimum moisture. The scarified zone shall then be uniformly compacted to 90% relative compaction.

Where fill material is to be placed on ground with slopes steeper than 5:1 (H:V) the sloping ground shall be benched. The lowermost bench shall be a minimum of 15 feet wide, shall be a minimum of 2 feet deep, and shall expose firm material as determined by the geotechnical consultant. Other benches shall be excavated to firm material as determined by the geotechnical consultant and shall have a minimum width of 4 feet.

Existing ground that is determined to be unsatisfactory for the support of fills shall be overexcavated in accordance with the recommendations contained in the geotechnical report of which these general specifications are a part.

D-4.00 FILL MATERIALS

D-4.01 General

Materials for the fill shall be free from vegetable matter and other deleterious substances, shall not contain rocks or lumps of a greater dimension than is recommended by the geotechnical consultant, and shall be approved by the geotechnical consultant. Soils of poor gradation, expansion, or strength properties shall be placed in areas designated by the geotechnical consultant or shall be mixed with other soils providing satisfactory fill material.

D-4.02 Oversize Material

Oversize material, rock, or other irreducible material with a maximum dimension greater than 12 inches shall not be placed in fills, unless the location, materials, and disposal methods are specifically approved by the geotechnical consultant. Oversize material shall be placed in such a manner that nesting of oversize material does not occur and in such a manner that the oversize material is completely surrounded by fill material compacted to a minimum of

90% relative compaction. Oversize material shall not be placed within 10 feet of finished grade without the approval of the geotechnical consultant.

D-4.03 Import

Material imported to the site shall conform to the requirements of Section 4.01 of these specifications. Potential import material shall be approved by the geotechnical consultant prior to importation to the subject site.

D-5.00 PLACING AND SPREADING OF FILL

D-5.01 Fill Lifts

The selected fill material shall be placed in nearly horizontal layers which when compacted will not exceed approximately 6 inches in thickness. Thicker lifts may be placed if testing indicates the compaction procedures are such that the required compaction is being achieved and the geotechnical consultant approves their use.
Each layer shall be spread evenly and shall be thoroughly blade mixed during the spreading to insure uniformity of material in each layer.

D-5.02 Fill Moisture

When the moisture content of the fill material is below that recommended by the soils engineer, water shall then be added until the moisture content is as specified to assure thorough bonding during the compacting process.

When the moisture content of the fill material is above that recommended by the soils engineer, the fill material shall be aerated by blading or other satisfactory methods until the moisture content is as specified.

D-5.03 Fill Compaction

After each layer has been placed, mixed, and spread evenly, it shall be thoroughly compacted to not less than 90% relative compaction. Compaction shall be by sheepsfoot rollers, multiple-wheel pneumatic tired rollers, or other types approved by the soil engineer.

Rolling shall be accomplished while the fill material is at the specified moisture content. Rolling of each layer shall be continuous over its entire area and the roller shall make sufficient trips to ensure that the desired density has been obtained.

D-5.04 Fill Slopes

Fill slopes shall be compacted by means of sheepsfoot rollers or other suitable equipment. Compacting of the slopes may be done progressively in increments of 3 to 4 feet in fill height. At the completion of grading, the slope face shall be compacted to a minimum of 90% relative compaction. This may require track rolling or rolling with a grid roller attached to a tractor mounted side-boom.

Slopes may be over filled and cut back in such a manner that the exposed slope faces are compacted to a minimum of 90% relative compaction.

The fill operation shall be continued in six inch (6") compacted layers, or as specified above, until the fill has been brought to the finished slopes and grades as shown on the accepted plans.

D-5.05 Compaction Testing

Field density tests shall be made by the geotechnical consultant of the compaction of each layer of fill. Density tests shall be made at locations selected by the geotechnical consultant.

Frequency of field density tests shall be not less than one test for each 2.0 feet of fill height and at least every one thousand cubic yards of fill. Where fill slopes exceed four feet in height their finished faces shall be tested at a frequency of one test for each 1000 square feet of slope face.

Where sheepsfoot rollers are used, the soil may be disturbed to a depth of several inches. Density reading shall be taken in the compacted material below the disturbed surface. When these readings indicate that the density of any layer of fill or portion thereof is below the required density, the particular layer or portion shall be reworked until the required density has been obtained.

D-6.00 SUBDRAINS

D-6.01 Subdrain Material

Subdrains shall be constructed of a minimum 4-inch diameter pipe encased in a suitable filter material. The subdrain pipe shall be Schedule 40 Acrylonitrile Butadiene Styrene (ABS) or Schedule 40 Polyvinyl Chloride Plastic (PVC) pipe or approved equivalent. Subdrain pipe shall be installed with perforations down. Filter material shall consist of 3/4" to 1 1/2" clean gravel wrapped in an envelope of filter fabric consisting of Mirafi 140N or approved equivalent.

D-6.02 Subdrain Installation

Subdrain systems, if required, shall be installed in approved ground to conform the approximate alignment and details shown on the plans or herein. The subdrain locations shall not be changed or modified without the approval of the geotechnical consultant. The geotechnical consultant may recommend and direct changes in the subdrain line, grade or material upon approval by the design civil engineer and the appropriate governmental agencies.

D-7.00 EXCAVATIONS

D-7.01 General

Excavations and cut slopes shall be examined by the geotechnical consultant. If determined necessary by the geotechnical consultant, further excavation or overexcavation and refilling of overexcavated areas shall be performed, and/or remedial grading of cut slopes shall be performed.

D-7.02 Fill-Over-Cut Slopes

Where fill-over-cut slopes are to be graded the cut portion of the slope shall be made and approved by the geotechnical consultant prior to placement of materials for construction of the fill portion of the slope.

D-8.00 TRENCH BACKFILL

D-8.01 General

Trench backfill within street right of ways shall be compacted to 90% relative compaction as determined by the ASTM D1557 test method. Backfill may be jetted as a means of initial compaction; however, mechanical compaction will be required to obtain the required percentage of relative compaction. If trenches are jetted, there must be a suitable delay for drainage of excess water before mechanical compaction is applied.

D-9.00 SEASONAL LIMITS

D-9.01 General

No fill material shall be placed, spread or rolled while it is frozen or thawing or during unfavorable weather conditions. When the work is interrupted by heavy rain, fill operations shall not be resumed until field tests by the soils engineer indicate that the moisture content and density of the fill are as previously specified.

D-10.00 SUPERVISION

C-10.01 Prior to Grading

The site shall be observed by the geotechnical consultant upon completion of clearing and grubbing, prior to the preparation of any original ground for preparation of fill.

The supervisor of the grading contractor and the field representative of the geotechnical consultant shall have a meeting and discuss the geotechnical aspects of the earthwork prior to commencement of grading.

D-10.02 During Grading

Site preparation of all areas to receive fill shall be tested and approved by the geotechnical consultant prior to the placement of any fill.

The geotechnical consultant or his representative shall observe the fill and compaction operations so that he can provide an opinion regarding the conformance of the work to the recommendations.

APPENDIX E

REFERENCES

REFERENCES

1. California Building Standards Commission, 2019 California Building Code.

2. Google Earth (2021), Aerial Photographs, 1994-2021.

3. NETR Online Historic Aerials and Topographic Maps, www.historicaerials.com, Aerial Photographs 1948-2016, Topographic Maps 1898-2018.

4. State of California, Department of Conservation, http://www.conservation.ca.gov/cgs/Pages/Index.aspx

5. Applied Technology Council (ATC) Hazards by Location https://hazards.atcouncil.org

6. https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer#currentconditions

7. California Geologic Survey, Geologic Hazard Data and Maps, Online Website: https://www.arcgis.com/home/webmap/viewer.html?url=https%3A%2F%2Fgis.conservation.ca.gov%2Fserver%2Frest%2Fservices%2FCGS_Earthquake_Hazard_Zones%2FSHP_Fault_Zones%2FFeatureServer&source=sd

8. Dibblee, T.W. Jr., 2008, Geologic Map of the Rosamond and Rogers Lake 15 Minute Quadrangles, Kern and Los Angeles Counties, California

9. Duell Jr., L.F.W., 1987, Geohydrology of the Antelope Valley Area, California and Design of a Groundwater Quality Monitoring Network, U.S. Geological Survey, Water-Resources Investigation Report 84-4081.

10. Ikehara, M.E., and Phillips, S.P., 1994, Determination of Land Subsidence Related to Groundwater Declines Using Global Positioning System and Leveling Surveys in Antelope Valley, Los Angeles and Kern Counties, California, U.S. Geological Survey, Water-Resources Investigation Report 94-4184

11. Siade, A.J, Nishikawa, T., Rewis, D.L., Martin, P., and Phillips, S.P., 2014, Groundwater-Flow and Land-Subsidence, Model of Antelope Valley, California, U.S. Geologic Survey, Scientific Investigations Report 2014-5166.

SHEET 3

SHEET 4

SHEET 5

SHEET 6

SIERRA HWY

N0°14'31"W
2655.86'

N0°13'38"W
661.99'

S0°12'44"E
5295.92'

N88°29'37"E
2683.88'

SOPP ROAD

PROPOSED
SOLAR FIELDS

PROPOSED
SOLAR FIELDS

BUILDING 3
OFFICE BUILDING
10,500 SF
H=21'

BUILDING 4
LOCKER ROOM
4,400 SF
H=18'

BUILDING 5
SLAG PROCESSING
OFFICE BUILDING
4,000 SF
H=18'

WATER TREATMENT PLANT

BUILDING 6
CONTAINERIZED PCR
4,000 SF H=18'

BUILDING 1
MICRO MILL FACILITY
475,000 SF
H=80'

BUILDING 2
STOREROOM AND VEHICLE
MAINTENANCE BUILDING
27,385 SF H=25'

PROP.
PREPARED SCRAP
STORAGE AREA
(3.9 ACRES)

PROP. STAGING AND
SPARE PARTS STORAGE
(6.0 ACRES)
(CONCRETE SURFACING)

FUME TREATMENT PLANT

BUILDING 7
GUARD SHACK /
SCALE HOUSE
900 SF
H=18'

PROP.
SETTLEMENT POND

PROP.
DETENTION BASIN

PROP.
SETTLEMENT POND

PROP.
DETENTION BASIN

BUILDING 8
TRUCKER RESTROOM FACILITY
36 SF
H=18'

PROPOSED PRIVATE ROAD

OVERALL PRELIMINARY SITE PLAN

SCALE: 1" = 150'

N

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A	04/21/21	CONDITIONAL USE PERMIT	MBI
B	07/02/21	CONDITIONAL USE PERMIT UPDATE	MBI
C	08/19/22	CONDITIONAL USE PERMIT UPDATE	MBI
D	09/13/22	CONDITIONAL USE PERMIT UPDATE	MBI
E	09/22/22	CONDITIONAL USE PERMIT UPDATE	MBI

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PLATE 1

Boring and Test Pit Location Map
Micro Mill
860 Sopp Road
Mojave, CA

T ▌ TEST PIT LOCATION

B ● BORING LOCATION

PACIFIC STEEL GROUP

MICRO MILL
860 SOPP ROAD
MOJAVE, CALIFORNIA 93501

PDP NO. 3, MAP 213

DRAWING TITLE

KEY MAP

SHEET NUMBER

2 OF 6

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Appendix I

Paleontological Resources Assessment Report

For Public Distribution

Mojave Micro Mill Project

Paleontological Resources Assessment Report

Prepared for
Pacific Steel Group
4805 Murphy Canyon Road
San Diego, California 92123

September 2022

ESA

For Public Distribution

Mojave Micro Mill Project

Paleontological Resources Assessment Report

September 2022

Prepared for:
Pacific Steel Group
4805 Murphy Canyon Road
San Diego, California 92123

Prepared by:
ESA
626 Wilshire Blvd. Suite 1100
Los Angeles, CA 90017

Project Director:
Monica Strauss, M.A., RPA

Principal Investigator and Author:
Russell Shapiro, Ph.D.

Project Location:
Soledad Mountain (CA) USGS 7.5-minute Topographic Quad
Township 10 North, Range 12 West, Section 27

Acreage: approx. 174 acres

Assessor's Parcel Numbers: 431-010-02
and 431-030-02

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Suite 1100
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EXECUTIVE SUMMARY

Mojave Micro Mill Project - Paleontological Resources Assessment Report

Environmental Science Associates (ESA) has been retained by the Pacific Steel Group (Applicant) to conduct a Paleontological Resources Assessment for the Mojave Micro Mill Project (Project) in support of an Environmental Impact Report (EIR) being prepared pursuant to the California Environmental Quality Act (CEQA). Kern County is the leady agency pursuant to CEQA. The Project proposes the construction and operation of a micro mill facility and associated infrastructure necessary to produce reinforcing bar (rebar) from scrap metal (e.g., shredded automobiles, appliances, structural and sheet metal, and other pre-processed steel bundles) through various recycling processes.

Geologic maps indicate late Pleistocene to early Holocene-age (14,000 to 4,000 years old) Quaternary alluvium (map unit Qa) is mapped at the surface within the Project area. This geologic unit has a low to high paleontological sensitivity increasing with depth.

On March 22, 2021, ESA received a database search from the Natural History Museum of Los Angeles County (LACM) for records of fossil localities in and around the Project area. Although no paleontological resources were identified within the Project area as a result of the search, four Pleistocene age fossil localities were identified in the Project's vicinity. The four localities were identified at depths as shallow as 3 feet below ground surface and up to 21 feet below ground surface (bgs).

Based on this analysis, Project ground disturbing activities have the potential to impact paleontological resources based on depth of ground disturbance. Surface scraping, stockpiling, and grading are considered surficial and would not impact fossil resources. However, deeper excavations, extending 5 feet below grade or more, have the potential to encounter and significantly impact paleontological resources in the Quaternary alluvium mapped at surface within the Project area. To reduce potential significant impacts to paleontological resources to less than significant, recommended mitigation measures are provided in the *Summary and Recommendations* Section at the close of this report.

Mojave Micro Mill Project

Paleontological Resources Assessment Report

Introduction

Environmental Science Associates (ESA) has been retained by the Pacific Steel Group (Applicant) to conduct a Paleontological Resources Assessment for the Mojave Micro Mill Project (Project) in support of an Environmental Impact Report (EIR) being prepared pursuant to the California Environmental Quality Act (CEQA). Kern County is the leady agency pursuant to CEQA. The Project proposes the construction and operation of a micro mill facility and associated infrastructure necessary to produce reinforcing bar (rebar) from scrap metal (e.g., shredded automobiles, appliances, structural and sheet metal, and other pre-processed steel bundles) through various recycling processes.

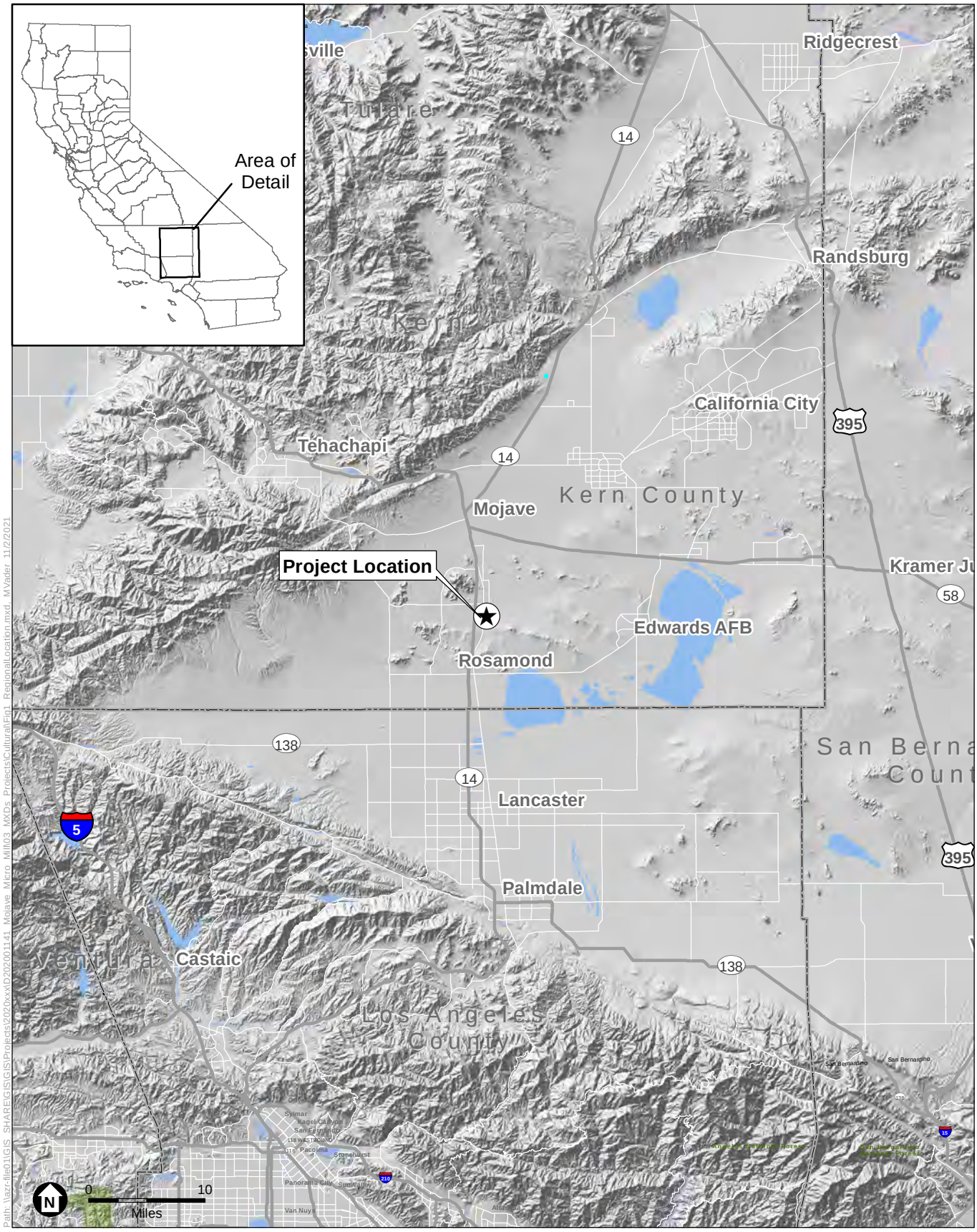
ESA personnel involved in the preparation of this report are as follows: Monica Strauss, M.A., RPA., Project Director; Russell Shapiro, Ph.D., Principal Investigator and report author; Michael Vader, B.A., report contributor; and Stephan Geisler, GIS specialist. Resumes of key personnel are included in **Appendix A**.

Project Location

The 174-acre project site is located in the Mojave Desert in the southwest portion of Kern County, along Highway 14 equidistant between the communities of Mojave to the north and Rosamond to the south (**Figure 1**). The Project includes Assessor Parcel Numbers (APNs) 431-010-02 and 431-030-02 and is bounded by Sopp Road to the north, a segment of the Atchison Topeka and Santa Fe Railroad to the west, and Edwards Air Force Base to the east and undeveloped land to the south (**Figure 2**). Specifically, the Project is located in Section 27 of Township 10 North, Range 12 West of the Soledad Mountain, CA 7.5-minute USGS topographic quadrangle (**Figure 3**).

Project Description

The Project proposes to construct and operate a micro mill facility and associated infrastructure necessary to produce rebar from scrap metal (e.g., shredded automobiles, appliances, structural and sheet metal, and other pre-processed steel bundles) through various recycling processes. Rebar is used in concrete to provide additional strength, as concrete is weak in tension, while steel is strong in both tension and compression. As rebar is used in all aspects of construction that require concrete, there is a high demand in California for rebar. However, as the last California rebar manufacturing facility in Rancho Cucamonga closed in 2020, there is need for need for an environmentally responsible, reliable, long-term method for disposing of junk cars and other iron and steel scrap and production of rebar in California.

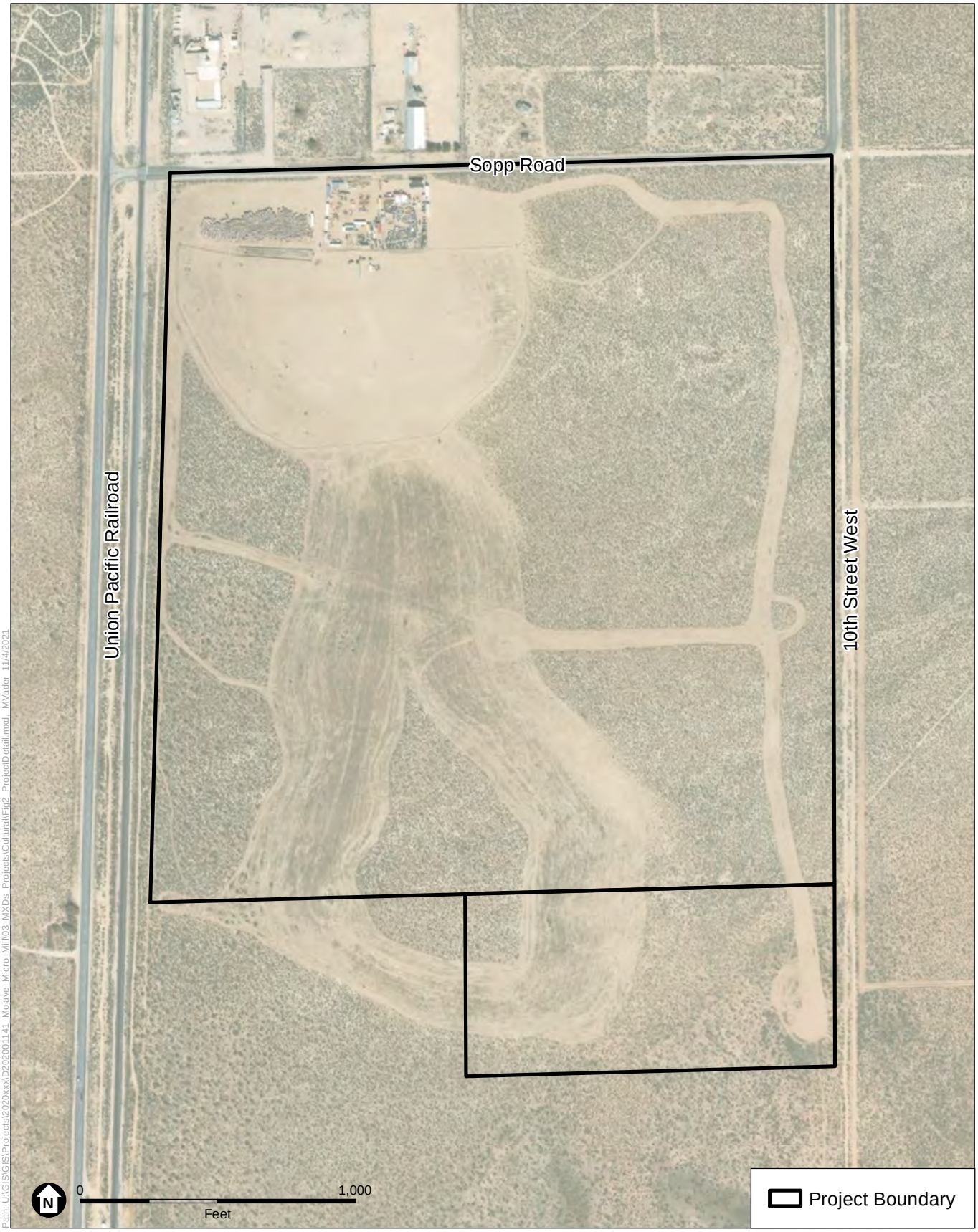


SOURCE: ESRI

Mojave Micro Mill Project

Figure 1
Regional Location

ESA

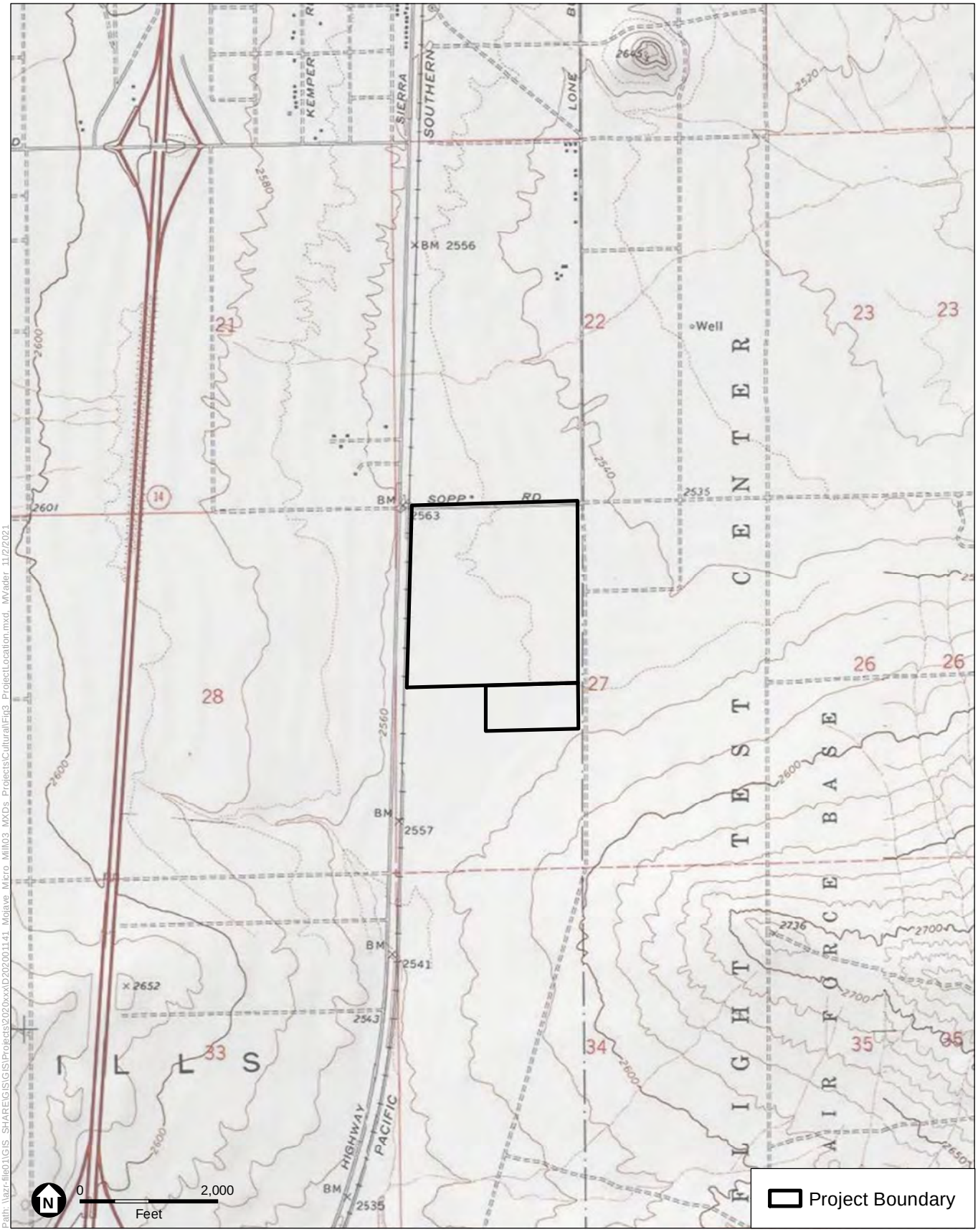


SOURCE: SSJVIC, 2021

Mojave Micro Mill Project

Figure 2
Project Detail

ESA



SOURCE: SSJVIC, 2021

Mojave Micro Mill Project

Figure 3
Project Location

ESA

Project Components

The combined Project facilities are depicted in **Figure 4** and would include the following components:

Micro Mill Facility - The approximate 475,800 square-foot facility includes 13 connected and standalone buildings, as follows:

Raw Material Handling

- 34,500 square foot scrap bay (approximately 75 feet high) for metal scrap storage areas;

Melt Shop Process

- 14,700 square foot electric arc furnace (EAF)/ladle metallurgy station (LMS) bay (approximately 110 feet high) with 3 bridge cranes (76 feet high);
- 12,500 square foot caster bay (approximately 100 feet high) with a 76-foot bridge crane;
- 6,600 square foot melt shop (MS) Complex structure (38 feet heigh);
- 8,700 square foot ladle maintenance bay (approximately 38 feet high);

Rolling Mill Process

- 61,000 square foot rolling mill bay (approximately 50 feet high);
- 18,700 square foot roll shop (approximately 35 feet high);
- 6,100 square foot service bay (approximately 40 feet high);
- 12,100 square foot spooler bay (approximately 35 feet high);
- 118,100 square foot finished goods bay (approximately 50 feet high);
- 400 square foot test bay (approximately 22 feet high);

Fabrication Shop Process

- 91,200 square foot stock bay (approximately 50 feet high); and
- 91,200 square foot fabrication bay (approximately 45 feet high).

Ancillary Buildings – The micro mill facility would be supported by seven ancillary structures that would serve the operation of the micro mill facility, as follows:

- 27,385 square foot storeroom and vehicle maintenance building (approximately 25 feet high);
- 10,500 square foot office building (approximately 21 feet high);
- 4,400 square foot locker room (approximately 18 feet high);
- 4,000 square foot slag processing office building;
- 4,000 square foot Containerized Power Control Room (PCR);
- 900 square foot guard shack/scale house; and
- 36 square foot Trucker Restroom Facility.

Additional Site Components – Other notable components of the project site are as follows:

- Approximately 63 acres of ground-mounted solar panels;

- Substation to support ground-mounted solar panels;
- Fume Treatment Plant (approximately 120 feet high);
- A water treatment plant that includes a settling basin, cooling towers, pump pads, and heat exchangers;
- Slag Processing Plant;
- Dolomite and lime silos (approximately 40 feet high);
- Staging and spare parts storage;
- Numerous AC power unit substations throughout the project area in order to power the various buildings;
- On-site access corridors;
- 7 foot high perimeter security fencing (6 foot high chain link fence with 1 foot high barbed wire);
- On-site parking area including approximately 246 auto parking spaces, 17 truck stalls, and 50 trailer stalls;
- Road improvements along Sopp Road and future private road south of Lone Butte Road Sopp Road corner;
- Landscaping; and
- New pavement, curb and gutter, and sidewalk.

Implementation of the proposed project includes the following requests:

- An amendment to the Land Use Element of the Kern County General Plan from Map Code 8.5 (Resource Management) to 7.3 (Heavy Industrial), or a more restrictive map code designation;
- A change in Zone Classification from A-1 (Limited Agriculture) to M-3 PD (Heavy Industrial - Precise Development Combining) District;
- A Precise Development Plan for conformity with the requested Zone Classification Change to M-3 PD.
- A Zone Variance for a reduction in the required number parking spaces from 993 spaces to 246 spaces.

Regulatory Framework

Paleontological resources are limited, nonrenewable resources of scientific, cultural, and educational value that are afforded protection under state laws and regulations. The following section summarizes the applicable state laws and regulations, as well as professional standards provided by the Society of Vertebrate Paleontology (SVP, 2010).

State Regulations

California Environmental Quality Act

The State CEQA Guidelines (Title 14, Chapter 3 of the California Code of Regulations, Section 15000 *et seq*.), are prescribed by the Secretary of Resources to be followed by state and local agencies in California in their implementation of the CEQA. Appendix G of the State CEQA Guidelines includes an Environmental Checklist Form with questions that may be used by public agencies in their assessment of impacts on the environment. The question within Appendix G that relates to paleontological resources states: "Will the proposed project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?" CEQA protects paleontological resources by requiring an assessment of a project's potential paleontological impacts.

Public Resources Code Section 5097.5 and Section 30244

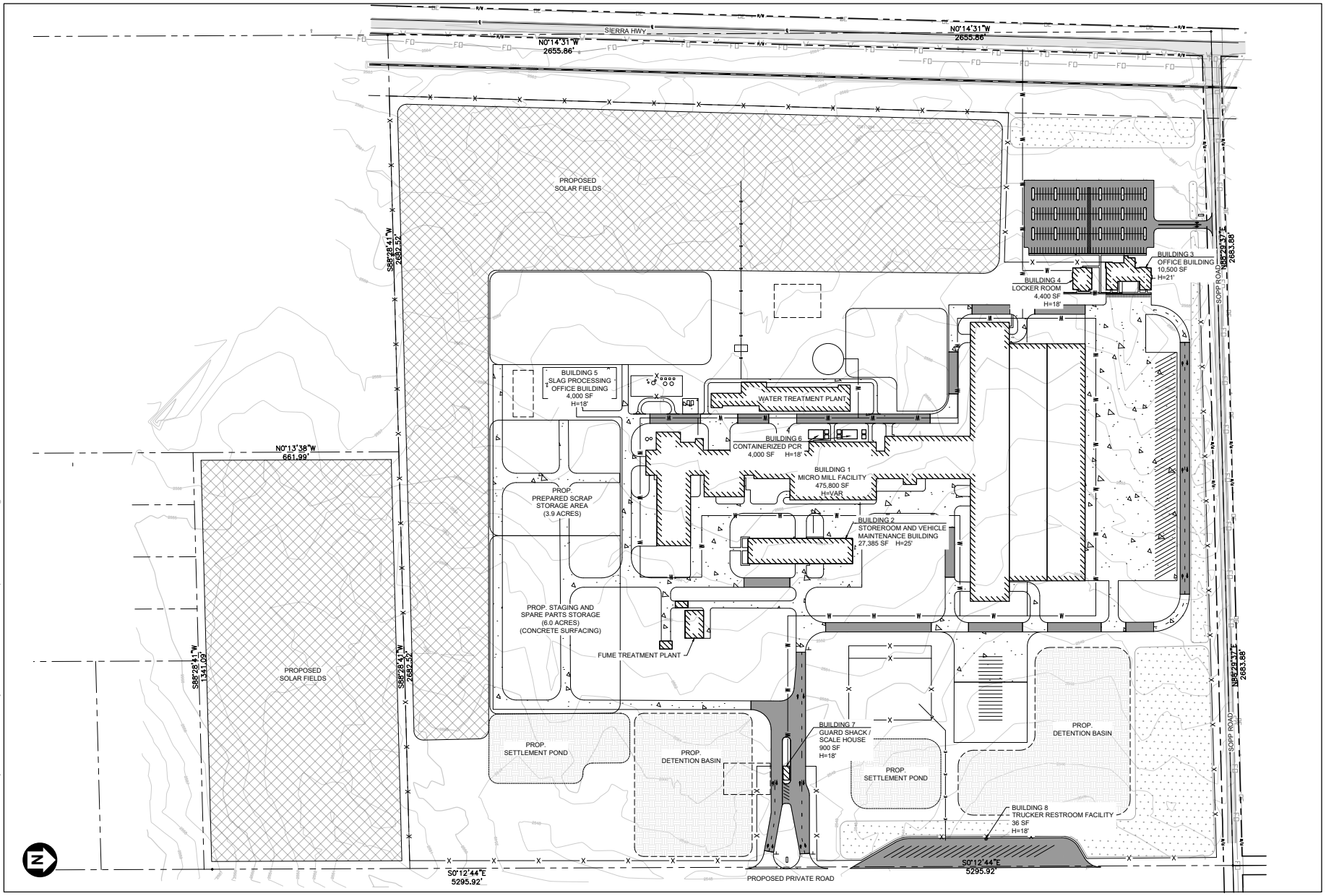
Other state requirements for paleontological resource management are included in PRC Section 5097.5 and Section 30244. These statutes prohibit the removal of any paleontological site or feature from public lands without permission of the jurisdictional agency, define the removal of paleontological sites or features as a misdemeanor, and require reasonable mitigation of adverse impacts to paleontological resources from developments on public (state, county, city, district) lands.

Society for Vertebrate Paleontology

The SVP has established standard guidelines (SVP, 1995, 2010) that outline professional protocols and practices for conducting paleontological resource assessments and surveys, monitoring and mitigation, data and fossil recovery, sampling procedures, and specimen preparation, identification, analysis, and curation. Most practicing professional vertebrate paleontologists adhere closely to the SVP's assessment, mitigation, and monitoring requirements as specifically provided in its standard guidelines. Most state regulatory agencies with paleontological resource-specific Laws, Ordinances, Regulations, and Standards (LORS) accept and use the professional standards set forth by the SVP.

As defined by the SVP (1995:26), significant nonrenewable paleontological resources are:

> *Fossils and fossiliferous deposits here restricted to vertebrate fossils and their taphonomic and associated environmental indicators. This definition excludes invertebrate or paleobotanical fossils except when present within a given vertebrate assemblage. Certain invertebrate and plant fossils may be defined as significant by a project paleontologist, local paleontologist, specialists, or special interest groups, or by lead agencies or local governments.*



2020/D2020011401.00 - Mojave Micro Mill Project - Pacific Steel/05 Graphics-GIS-Modeling/Illustrator

SOURCE: R.E. Warner, 2022

Mojave Micro Mill Project

Figure 4
Project Facilities

ESA

As defined by the SVP (1995:26), significant fossiliferous deposits are:

> *A rock unit or formation which contains significant nonrenewable paleontologic resources, here defined as comprising one or more identifiable vertebrate fossils, large or small, and any associated invertebrate and plant fossils, traces, and other data that provide taphonomic, taxonomic, phylogenetic, ecologic, and stratigraphic information (ichnites and trace fossils generated by vertebrate animals, e.g., trackways, or nests and middens which provide datable material and climatic information). Paleontologic resources are considered to be older than recorded history and/or older than 5,000 years BP [before present].*

Based on the significance definitions of the SVP (1995), all identifiable vertebrate fossils are considered to have significant scientific value. This position is adhered to because vertebrate fossils are relatively uncommon, and only rarely will a fossil locality yield a statistically significant number of specimens of the same genus. Therefore, every vertebrate fossil found has the potential to provide significant new information on the taxon it represents, its paleoenvironment, and/or its distribution. Furthermore, all geologic units in which vertebrate fossils have previously been found are considered to have high sensitivity. Identifiable plant and invertebrate fossils are considered significant if found in association with vertebrate fossils or if defined as significant by project paleontologists, specialists, or local government agencies.

A geologic unit known to contain significant fossils is considered to be "sensitive" to adverse impacts if there is a high probability that earth-moving or ground-disturbing activities in that rock unit will either directly or indirectly disturb or destroy fossil remains. Paleontological sites indicate that the containing sedimentary rock unit or formation is fossiliferous. The limits of the entire rock formation, both areal and stratigraphic, therefore define the scope of the paleontological potential in each case (SVP, 1995).

Fossils are contained within surficial sediments or bedrock, and are therefore not observable or detectable unless exposed by erosion or human activity. Therefore, without natural erosion or human-caused exposure, paleontologists cannot know either the quality or quantity of fossils. As a result, even in the absence of surface fossils, it is necessary to assess the sensitivity of rock units based on their known potential to produce significant fossils elsewhere within the same geologic unit (both within and outside of the study area), a similar geologic unit, or based on whether the unit in question was deposited in a type of environment that is known to be favorable for fossil preservation. Monitoring by experienced paleontologists greatly increases the probability that fossils will be discovered during ground-disturbing activities and that, if the fossils are significant, that successful mitigation and salvage efforts may be undertaken.

Paleontological Sensitivity

Paleontological sensitivity is defined as the potential for a geologic unit to produce scientifically significant fossils. This is determined by rock type, past history of the geologic unit in producing significant fossils, and fossil localities recorded from that unit. Paleontological sensitivity is derived from the known fossil data collected from the entire geologic unit, not just from a specific survey. In its "Standard Guidelines for the Assessment and Mitigation of Adverse Impacts to

Non-renewable Paleontologic Resources," the SVP (2010:1-2) defines four categories of paleontological sensitivity (potential) for rock units: high, low, undetermined, and no potential:

- **High Potential.** Rock units from which vertebrate or significant invertebrate, plant, or trace fossils have been recovered are considered to have a high potential for containing additional significant paleontological resources. Rocks units classified as having high potential for producing paleontological resources include, but are not limited to, sedimentary formations and some volcaniclastic formations (e. g., ashes or tephras), and some low-grade metamorphic rocks which contain significant paleontological resources anywhere within their geographical extent, and sedimentary rock units temporally or lithologically suitable for the preservation of fossils (e. g., middle Holocene and older, fine-grained fluvial sandstones, argillaceous and carbonate-rich paleosols, cross-bedded point bar sandstones, fine-grained marine sandstones, etc.).

- **Low Potential.** Reports in the paleontological literature or field surveys by a qualified professional paleontologist may allow determination that some rock units have low potential for yielding significant fossils. Such rock units will be poorly represented by fossil specimens in institutional collections, or based on general scientific consensus only preserve fossils in rare circumstances and the presence of fossils is the exception not the rule, e. g. basalt flows or Recent colluvium. Rock units with low potential typically will not require impact mitigation measures to protect fossils.

- **Undetermined Potential.** Rock units for which little information is available concerning their paleontological content, geologic age, and depositional environment are considered to have undetermined potential. Further study is necessary to determine if these rock units have high or low potential to contain significant paleontological resources. A field survey by a qualified professional paleontologist to specifically determine the paleontological resource potential of these rock units is required before a paleontological resource impact mitigation program can be developed. In cases where no subsurface data are available, paleontological potential can sometimes be determined by strategically located excavations into subsurface stratigraphy.

- **No Potential.** Some rock units have no potential to contain significant paleontological resources, for instance high-grade metamorphic rocks (such as gneisses and schists) and plutonic igneous rocks (such as granites and diorites). Rock units with no potential require no protection nor impact mitigation measures relative to paleontological resources.

For geologic units with high potential, full-time monitoring is generally recommended during any project-related ground disturbance. For geologic units with low potential, protection or salvage efforts will not generally be required. For geologic units with undetermined potential, field surveys by a qualified vertebrate paleontologist should be conducted to specifically determine the paleontologic potential of the rock units present within the study area.

Paleontological Resources Significance Criteria

Numerous paleontological studies have developed criteria for the assessment of significance for fossil discoveries (e.g. Eisentraut and Cooper, 2002; Murphey and Daitch, 2007; Scott and

Springer, 2003, etc.). In general, these studies assess fossils as significant if one or more of the following criteria apply:

1. The fossils provide information on the evolutionary relationships and developmental trends among organisms, living or extinct;
2. The fossils provide data useful in determining the age(s) of the rock unit or sedimentary stratum, including data important in determining the depositional history of the region and the timing of geologic events therein;
3. The fossils provide data regarding the development of biological communities or interaction between paleobotanical and paleozoological biotas;
4. The fossils demonstrate unusual or spectacular circumstances in the history of life; or
5. The fossils are in short supply and/or in danger of being depleted or destroyed by the elements, vandalism, or commercial exploitation, and are not found in other geographic locations.

In summary, significant paleontological resources are determined to be fossils or assemblages of fossils that are unique, unusual, rare, uncommon, or diagnostically important (Eisentraut and Cooper, 2002; Murphey and Daitch, 2007; Scott and Springer, 2003). Significant fossils can include remains of large to very small aquatic and terrestrial vertebrates or remains of plants and animals previously not represented in certain portions of the stratigraphy. Assemblages of fossils that might aid stratigraphic correlation, particularly those offering data for the interpretation of tectonic events, geomorphologic evolution, and paleoclimatology are also critically important (Scott and Springer, 2003; Scott et al., 2004).

Methods and Results

The Project was the subject of thorough background research and analysis to assess its paleontological sensitivity. The research included a paleontological records search conducted by the Natural History Museum of Los Angeles County (LACM), as well as geologic map and literature reviews conducted by ESA's Principal Paleontologist, Russell Shapiro, Ph.D.

Geologic Setting

The Project area lies at the western edge of the Mojave Desert in a broad valley bounded on the northwest by the Tehachapi Mountains and on the southwest by the San Gabriel Mountains. The sharp contrast between these mountains is due to the intersection of two major fault systems: the left-lateral Garlock Fault bounding the Tehachapis and the right-lateral San Andreas Fault Zone to the south (Hatem and Dolan, 2018). As transpression occurred along these fault systems over the past 10 million years, eroding sediment was deposited as alluvial fans and fluvial deposits, filling the valley below (Miller et al., 2020; Rittase et al., 2020). More recently, climatic shifts associated with the waxing and waning of ice ages led to the development of large lakes in the valley, such as Lake Thompson, now represented by the much smaller dry Rosamond Lake, south of the Project area (Orne, 2008). The lakes are now primarily dry and desert processes dominate the valleys.

Geologic Map Review

The geology of the Project area was originally mapped by Dibblee (1959) at 1:48,000 scale and later modified by Dibblee and Minch (2008) at 1:62:500 scale (**Figure 5**). In both these maps, the entire valley is mapped as Quaternary alluvium (map unit Qa) without differentiation. Ponti et al. (1981) provide a map focusing on the Quaternary geology of the region. While the specific Project area is not show as part of Ponti et al.'s mapping, the surficial units can be projected as map unit Q6m. Based on correlations throughout southern California, the authors connect Q6m—which means the sixth unit from the base of dominantly medium grain size—with the Upper Modesto Formation of the Great Valley. This would place the unit in the late Pleistocene to early Holocene, approximately 14,000 to 4,000 years old. The authors also note the oldest Quaternary units, Q1, overlie deposits with Rancholabrean land mammal fossils so are likely not older than 250,000 years (Riverbank Formation of Marchand and Allwardt, 1981). Therefore, the alluvium mapped at surface within the Project area is likely early Holocene to late Pleistocene in age.

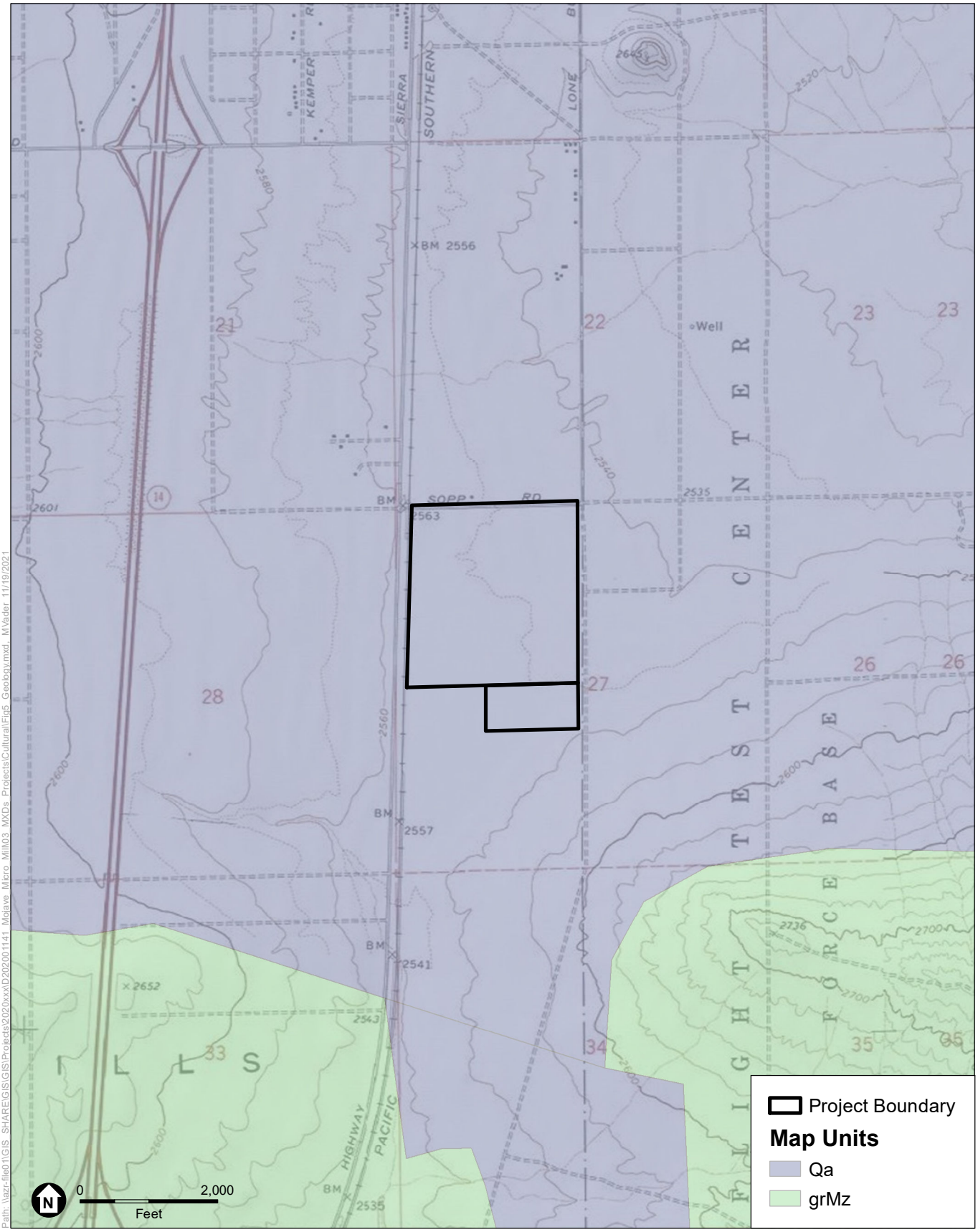
LACM Records Search

On March 22, 2021, ESA received a database search from the LACM for records of fossil localities in and around the Project area (Bell, 2021). The purpose of the museum records search was to: (1) determine whether any previously recorded fossil localities occur in the Project area, (2) assess the potential for disturbance of these localities during construction, and (3) evaluate the paleontological sensitivity within the Project area and vicinity. Although no paleontological resources were identified within the Project area as a result of the search, four Pleistocene age fossils localities were identified in the Project's vicinity. The four localities were identified at depths as shallow as 3 feet below ground surface and up to 21 feet below ground surface (bgs). These localities are summarized in **Table 1**. The LACM records search results are included in **Appendix B.**

TABLE 1 SUMMARY OF LACM FOSSIL SPECIMEN LOCALITIES

Locality No.	Formation	Taxa	Depth
LACM IP 455	Unknown Upper Pleistocene Formation	Invertebrates (unspecified)	Unknown
LACM VP 7891	Unknown Pleistocene Formation	Lamine camelid (*Hemiauchenia*)	21 feet bgs
LACM VP 7853	Unknown Pleistocene Formation	fish; amphibians; reptiles; small mammals, and camel (*Camelops*)	3 -11 feet bgs
LACM VP 7884	Unknown Pleistocene Formation	Camel (*Camelops hesternus*)	4 feet bgs

VP=Vertebrate Paleontology
IP=Invertebrate Paleontology



SOURCE: USGS, 2021

Mojave Micro Mill Project

Figure 5
Geology Map

ESA

Locality LACM IP 455 is an invertebrate locality at Edwards Air Force Base. As this locality is in ancient lacustrine deposits, it is not directly relevant to the Project, which is not located in the vicinity of Pleistocene-age lake playas, Locality LACM VP 7891 yielded a Lamine camelid (*Hemiauchenia*) within Pleistocene-aged soils at 21 feet bgs. Locality LACM VP 7853 produced fossils of fish, amphibians, reptiles, small mammals, and camel (*Camelops*) at depths between 3 and 11 feet bgs in Pleistocene-aged soils (made up of light tan-gray loose loess like sand under a dune deposit). Locality LACM VP 7884 produced a fossil camel (*Camelops hesternus*) at 4 feet bgs in Pleistocene-aged soils (consisting of brown clayey silt from a fluvial environment) (Bell, 2021). These latter two deposits have relevance to the Project as the geological settings are similar. In summary, the LACM records search indicates the Project area has the potential to contain subsurface fossil localities.

Literature Review

A literature review was conducted to determine whether paleontological resources have been previously identified in the particular geologic units that are mapped within the Project area. The Mojave Desert has a rich Pleistocene fossil record, with fossils recovered from alluvium as well as lake margin deposits (Scott et al., 2021; Springer et al., 2004; Whistler, 1990). The Late Pleistocene record is comprised of large herbivores (e.g., bison), suggesting a wetter and more diverse landscape during the last glacial period (Scott et al., 2019; Springer et al., 2004; Woodburne, 1991). However, the lack of detailed analysis of microvertebrate fossils precludes a full understanding of the ecosystem at that time. Based on the literature, the Project area may contain significant subsurface fossils that may contribute to a better understanding of late Pleistocene ecosystem evolution in the western Mojave.

Paleontological Sensitivity Analysis

The literature and geologic mapping review, as well as the LACM records search results, were used to assign paleontological sensitivity to the geologic units at surface and underlying the Project area, following the guidelines of the SVP (2010):

Quaternary Alluvium (Qa): These sediments likely date to the late Pleistocene and Early Holocene (14,000 to 4,000 years old) and have **Low to High Potential** for the presence of paleontological resources, increasing with depth. The exact depth at which the transition from low to high potential occurs is unknown within the Project area, but is likely to be less than 10 feet below surface based on the fossil localities in the region identified by the LACM records search.

Summary and Recommendations

The geologic map and literature review indicates much of the Project's surficial geology is comprised of late Pleistocene to early Holocene-age (14,000 to 4,000 years old) Quaternary alluvium. The Quaternary alluvium has low to high potential for the presence of paleontological resources, increasing with depth. As such, Project-related ground disturbing activities have the potential to impact paleontological resources based on depth of ground disturbance. Surface

scraping, stockpiling, and grading are considered surficial and would not impact fossil resources. However, deeper excavations, extending 5 feet below grade or more, have the potential to encounter and significantly impact paleontological resources in the Quaternary alluvium. Implementation of the following recommended mitigation measures would reduce potential significant impacts to paleontological resources to less than significant.

1. **Retention of a Qualified Paleontologist**. The Applicant shall retain a paleontologist who meets the Society of Vertebrate Paleontology's (SVP, 2010) definition for qualified profession paleontologist (Qualified Paleontologist) to carry out all mitigation related to paleontological resources.

2. **Paleontological Resources Sensitivity Training**. Prior to the start of ground-disturbing activities, the Qualified Paleontologist or their designee shall conduct construction worker paleontological resources sensitivity training for all construction personnel. Construction personnel shall be informed on how to identify the types of paleontological resources that may be encountered, the proper procedures to be enacted in the event of an inadvertent discovery of paleontological resources, and safety precautions to be taken when working with paleontological monitors. The Applicant shall ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance.

3. **Paleontological Resources Monitoring**. The Qualified Paleontologist shall supervise a paleontological monitor meeting SVP standards (2010) who shall be present during all construction excavation activities exceeding 5 feet within Quaternary alluvium (Qa) or until the contact with Pleistocene alluvium is better determined. Monitoring shall consist of visually inspecting fresh exposures of rock for larger fossil remains and, where appropriate, collecting wet or dry screened sediment samples of promising horizons for smaller fossil remains. The frequency of monitoring inspections shall be determined by the Qualified Paleontologist and shall be based on the rate of excavation and grading activities, the materials being excavated (i.e., native sediments versus artificial fill), the depth of excavation, and if found, the abundance and type of fossils encountered. Full-time monitoring can be reduced to part-time inspections or ceased entirely if determined adequate by the Qualified Paleontologist in consultation with the Applicant. Monitoring activities shall be documented in a Paleontological Resources Monitoring Report to be prepared by the Qualified Paleontologist at the completion of construction and shall be provided to the County and filed with the Natural History Museum of Los Angeles County within six (6) months of project completion.

4. **Inadvertent Discovery Protocols.** If a unique geologic feature or paleontological resource is discovered during construction, the paleontological monitor shall be empowered to temporarily divert or redirect grading and excavation activities in the area of the exposed fossil to facilitate evaluation of the discovery. An appropriate buffer area shall be established by the Qualified Paleontologist around the find where construction activities shall not be allowed to continue. Work shall be allowed to continue outside of the buffer area. At the Qualified Paleontologist's discretion and to reduce any

construction delay, the grading and excavation contractor shall assist in removing rock samples for initial processing and evaluation of the find. All significant fossils shall be collected by the paleontological monitor and/or the Qualified Paleontologist. Collected fossils shall be prepared to the point of identification and catalogued before they are submitted to their final repository. Any fossils collected shall be curated at a public, non-profit institution with a research interest in the materials, such as the Los Angeles County Natural History Museum, if such an institution agrees to accept the fossils. If no institution accepts the fossil collection, they shall be donated to a local school in the area for educational purposes. Accompanying notes, maps, and photographs shall also be filed at the repository and/or school.

References

Bell, A. 2021. Paleontological Resources Records Search Results from the Natural History Museum of Los Angeles County for the Mojave Micro Mill Project.

Dibblee, T.W. 1959. Geology of the Rosamond Quadrangle, California: U.S. Geological Survey Open-File Report OF-59-30: scale 1:48,000.

Dibblee, T.W., and J.A. Minch. 2008. Geologic Map of the Rosamond and Rogers Lake 15-minute quadrangles, Kern and Los Angeles Counties, California: Dibblee Geological Foundation Map DF-384: Scale 1:62,500

Hatem, A.E., and J.F. Dolan. 2018. A Model for the Initiation, Evolution, and Controls on Seismic Behavior of the Garlock Fault, California: Geochemistry, Geophysics, Geosystems - G3 19(7):2166-2178.

Marchand, D.E., and A. Allwardt. 1981. Late Cenozoic Stratigraphic Units, Northeastern San Joaquin Valley, California: U. S. Geological Survey Bulletin (1981): 70 p.

Miller, D.E., C. Montejo, J.E. Moreno, R.N. James, S. McKinney, et al. 2020. Evidence for Cenozoic Landscape Evolution in the Tehachapi Mtns, CA from Polycyclic Fluvial Conglomerates: Abstracts with Programs - Geological Society of America 52(4): Abstract No. 22-4.

Murphey, P. C., and D. Daitch. 2007. Paleontological Overview of Oil Shale and Tar Sands Areas in Colorado, Utah and Wyoming. U.S. Department of Energy, Argonne National Laboratory. Report prepared for the U.S. Department of Interior Bureau of Land Management: scale 1:500,000.

Orme, A.R. 2008. Lake Thompson, Mojave Desert, California; the Late Pleistocene Lake System and its Holocene Desiccation in Reheis, M., Hershler, R., and Miller, D.M. (eds.). Late Cenozoic Drainage History of the Southwestern Great Basin and Lower Colorado River Region; Geologic and Biotic Perspectives: Special Paper - Geological Society of America 439: 261-278. DOI:10.1130/2008.2439(11)

Ponti, D.J., D.B. Burke, and C.W. Hedel. 1981. Map Showing Quaternary geology of the Central Antelope Valley and Vicinity, California: U.S. Geological Survey Open-File Report OF-81-737: Scale: 1:62,500.

Rittase, W.M., D.J. Walker, J. Andrew, E. Kirby, and E. Wan. 2020. Pliocene-Pleistocene Basin Evolution along the Garlock Fault Zone, Pilot Knob Valley, California: Geosphere (Boulder, CO), v. Pre-Issue Publication. DOI:10.1130/GES02209.1

Scott, E., S.M. Cox, and D.P. Whistler. 2001. Stratigraphy and Extinct Late Pleistocene Megafauna from Dove Spring Wash, Northwestern Mojave Desert, Kern County, California: Abstracts with Programs – Geological Society of America 33(3):43.

Scott, E. and K. Springer. 2003. CEQA and Fossil Preservation in Southern California. The Environmental Monitor 2003:4-10.

Scott, E., K. Springer, and J. Pigati. 2019. Fossils of Late Pleistocene Bison from Public Lands in the Colorado and Mojave Deserts; Implications for the Diversity and Biogeography of Bison in Southwestern North America: PaleoBios 36(1):316-317.

Scott, E., K. Springer, and J. C. Sagebiel. 2004. Vertebrate Paleontology in the Mojave Desert: The Continuing Importance of "Follow-Through" in Preserving Paleontologic Resources. In The Human Journey and Ancient Life in California's Deserts: Proceedings from the 2001 Millennium Conference. Ridgecrest: Maturango Museum Publication 15:65-70.

Society of Vertebrate Paleontology (SVP). 1995. Assessment and Mitigation of Adverse Impacts to Nonrenewable Paleontologic Resources: Standard Guidelines. Society of Vertebrate Paleontology News Bulletin 163:22-27.

——— 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. Electronic document. http://vertpaleo.org/The-Society/Governance-Documents/SVP_Impact_Mitigation_Guidelines.aspx, accessed 2021.

Springer, K.B., E.D. Scott, and J.C. Sagebiel. 2004. Pleistocene Vertebrate Fossils from Pinto Basin, Joshua Tree National Park, Mojave Desert, Southern California: Abstracts with Programs - Geological Society of America 36(5):230.

Whistler, D.P. 1990. A Late Pleistocene (Rancholabrean) Fossil Assemblage from the Northwestern Mojave Desert, California: Quarterly of San Bernardino County Museum Association 37(2):3-17.

Woodburne, M.O. 1991. The Mojave Desert Province in Reynolds, R.E. and D.P. Whistler (editors). Inland Southern California; the Last 70 Million Years; a Self-Guiding Tour of Major Paleontologic Localities from Temecula to Red Rock Canyon; Fossils, Structure, and Geologic History: Quarterly of San Bernardino County Museum Association 38(3-4):60-77.

APPENDIX A
Personnel



Monica Strauss, RPA

Director, Southern California Cultural Resources Group

EDUCATION

MA, Archaeology, California State University, Northridge

BA, Anthropology, California State University, Northridge

AA, Humanities, Los Angeles Pierce College

23 YEARS OF EXPERIENCE

SPECIALIZED EXPERIENCE

Treatment of Historic and Prehistoric Human Remains

Archaeological Monitoring

Complex Shell Midden Sites

Groundstone Analysis

PROFESSIONAL AFFILIATIONS

Register of Professional Archaeologists (RPA), #12805

Society for California Archaeology (SCA)

Society for American Archaeology (SAA)

QUALIFICATIONS

Exceeds Secretary of Interior's Qualifications Standards for Archaeology

Meets Caltrans PQS for Principal Investigator

CA State BLM Permitted

NV State BLM Permitted

Monica provides senior oversight to a multi-disciplinary team of cultural resources specialists throughout Southern California, including archaeologists, architectural historians, historians, and paleontologists. During her 23 years of practice, Monica has successfully directed hundreds of cultural resources projects meeting local, state, and/or federal regulatory requirements. Monica's strength lies in assisting clients in navigating complex cultural resources issues in the contexts of the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), and Section 106 of the National Historic Preservation Act (NHPA). Monica's experience ranges from large infrastructure projects that are controversial and multi-jurisdictional to smaller development projects that are important to local agencies and stakeholders. She has excellent experience working with agencies to develop creative mitigation to address challenging cultural resources impacts. She directs a staff who conduct Phase 1 archaeological/ paleontological and historic architectural surveys, construction monitoring, Native American outreach, archaeological testing and treatment, historic resource significance evaluations, and large-scale data recovery programs. Monica is expert in the area of Assembly Bill 52 and routinely provides training to her clients as well as being a workshop content author and session presenter for the Association of Environmental Professionals on the topic.

Relevant Experience

Los Angeles Department of Water and Power (LADWP) Foothill Trunk Line Project. City of Los Angeles, CA. *Cultural Resources Senior Reviewer.* ESA archaeologists have prepared a Phase I cultural resources study and EIR cultural resources section for the Los Angeles Department of Water and Power (LADWP) Trunk Line Project, located in the City of Los Angeles, CA. The proposed project includes the replacement of 16,600 feet of existing 24-inch-, 26-inch-, and 36-inch-diameter welded steel pipe and 30-inch-diameter riveted steel pipe with a 54-inch-diameter welded steel pipe along Foothill Boulevard within the districts of Pacoima and Sylmar. Monica served as the Senior Reviewer for the Phase I cultural resources study and EIR section.

Santa Clarita Valley Sanitation District, Facilities Plan Update EIR, Los Angeles County, CA. *Cultural Resources Senior Reviewer.* Monica is currently serving as senior reviewer for the Phase I cultural resources study for the project. The study identified 23 cultural resources within or adjacent to the project, including the historical San Fernando Road. The resources were documented and evaluated for their eligibility to the California Register in a technical report and the results were incorporated into the EIR. The project includes installation of an approximately 35-mile recycled water pipeline from the Santa Clarita Valley to east Los Angeles.

Santa Susana Field Laboratory, Ventura County, CA. *Cultural Resources Project Director.* The Santa Susana Field Laboratory is a former rocket engine test, nuclear, and liquid metals research facility located on a 2,849- acre portion of the Simi Hills in Simi Valley, California. The uses of hazardous substances such as trichloroethylene and other solvents, heavy metals, and radioactive material at the field laboratory have resulted in soil and/or groundwater contamination. The field laboratory is currently the focus of a comprehensive environmental investigation and cleanup program conducted by Boeing, the U.S. Department of Energy (DOE), and the National Aeronautics and Space Administration (NASA) and overseen by the Department of Toxic Substances Control (DTSC). ESA is preparing a Program EIR that will evaluate soil and groundwater remediation activities. Because there are multiple responsible parties with separate cleanup actions, the Program EIR will provide a framework for tiered environmental documents to be prepared to address the development and refinement of remediation approaches and actions. Monica is overseeing a team of specialists who are conducting a geoarcheological and archaeological district studies for use in addressing impacts to archaeological resources in the EIR. Monica provides strategic guidance to DTSC on cultural resources-related issues, including Tribal outreach, approach to the Traditional Cultural Property, resource evaluations, and treatment of cultural resources on a project and program level.

California Department of Water Resources (DWR), Perris Dam Remediation Program, Riverside County, CA. *Cultural Resources Project Director*. Monica managed the preparation of a Historic Resource Evaluation Report for the DWR Perris Remediation Project. The Project would provide greater seismic stability for Perris Dam and its associated outlet works, as well as adding a new emergency outlet extension channel, thereby increasing public safety in the event of a high-magnitude earthquake. The project involved the U.S. Army Corps of Engineers, requiring compliance with Section 106 of the NHPA The study concluded that the dam is not individually eligible for the National Register or California Register, but is considered a contributing element of the California Aqueduct. The project would not affect the eligibility or integrity of the California Aqueduct and a finding of no adverse effect were recommended.

City of Los Angeles Recreation and Parks, Hansen Dam Skate Park Project, Los Angeles County, CA. *Cultural Resources Principal Investigator*. ESA prepared a joint EA and IS/MND for the Los Angeles Department of Recreation and Parks in coordination with the U.S. Army Corps of Engineers (Corps) for a proposed skate park facility within the Hansen Dam Recreation Area. Monica managed a Phase I Cultural resources Study, coordinated with the Army Corps of Engineers and provided senior review for the EA/IS/MND cultural resources section.

City of Los Angeles, Bielenson Special Needs Ball Field IS/MND and EA/FONSI, Los Angeles, CA. *Cultural Resources Project Director*. ESA prepared a joint EA/FONSI and IS/MND and for the U.S. Army Corps of Engineers and Los Angeles Department of Recreation and Parks, in partnership with the Los Angeles Dodgers Dream Foundation, for a proposed wheelchair accessible softball field within the Sepulveda Basin Recreation Area, Anthony C. Beilenson Park, in Los Angeles, California. The proposed action would include a 50-foot softball field with backstop, dugouts, and field fencing.



Russell S. Shapiro, PhD

Principal Investigator

EDUCATION

Ph.D., Geological Sciences, University of California, Santa Barbara, 1998
B.S., Geology, Humboldt State University, 1992

25 YEARS EXPERIENCE

CERTIFICATIONS/ REGISTRATION

U.S. Fish and Wildlife Cultural Resources Use Permit
U.S. Forest Service Cultural Resources Use Permit
Bureau of Land Management Cultural Resources Use Permit
Wilderness and Remote First Aid (Red Cross Certified)

PROFESSIONAL AFFILIATIONS

Geobiology Society; Treasurer
Society for Sedimentary Geology (SEPM); Vice-President
Society for Vertebrate Paleontology

As a Principal Investigator, Dr. Shapiro has been involved in review of paleontological resource reports and evaluating proposed mitigation plans. Dr. Shapiro researches and prepares environmental impact reports regarding cultural resources (fossils), conducts field (geological and paleontological) surveys, and oversees ground disturbance at construction sites for Environmental Quality compliance (CEQA, NEPA, and the Paleontological Resources Preservation Act). As a Qualified Paleontologist, Dr. Shapiro has also reviewed resource planning documents for several counties in California and was the lead on the Bureau of Land Management's assessment of fossil resources of Northern California.

In his academic role as Professor of Geology, Dr. Shapiro teaches several paleontology courses including "Applied Paleontology" which is a modified "Cultural Resources" course, focusing on budgeting, CEQA and NEPA regulations, field surveys, GIS projections, fossil recovery, and curation. He also teaches in the annual Field Camp courses and manages the rock preparation lab and maintains the microscopes.

Relevant Experience

ReneSola Gentry Solar Project, Paleontological Resource Assessment Report, Lincoln, California. *Principal Investigator, Mapping*. Literature, geological map, and museum review for fossil resources. Field mapping of entire property. Final product included a mitigation and monitoring plan.

Paleontological Sensitivity Analysis Report, Elk Grove, California; Pacific Gas and Electric. *Principal Investigator*. Literature, geological map, and air photo archival report on the potential fossil yield for a proposed pipeline. Recommendations based on searches of museum collections of relevant geological formations. Deliverables consisted of a sensitivity report and appendix of known fossil occurrences by taxa and location.

Mojave Solar Project Cultural Services; San Bernardino County, California; CH2M Hill. *Principal Investigator.* Reviewed technical report; advised on scientific analyses.

El Camino Real Bridge Replacement Environmental Services; San Luis Obispo County, California, Quincy Engineering. *Principal Investigator*. Reviewed technical report for CEQA/NEPA documentation, technical studies, and permitting, for the replacement of the El Camino Real bridge over Santa Margarita Creek in Atascadero.

San Bernardino County General Plan Update: Paleontological Resources Technical Report. *Primary Reviewer***.** External reviewer for general plan update. Involved assessing all geological formations in San Bernardino County and museum records of significant fossils.

Recent Significant Excavations

Miocene Vertebrates of the Sheldon Wildlife National Refuge. Oversaw operations to conduct significant collection of Miocene-age fossils from volcanic sediments for the U.S. Fish and Wildlife Service. Duties included field collection and high-resolution GPS mapping, fossil preparation and identification, curation at the Gateway Science Museum.

Eocene Horses from Black Butte Lake Reservoir. Field jacketing and preparation of fossil horse skull material from the reservoir under the direction of the U.S. Army Corps of Engineers. Fossils were prepared, identified, and returned to the Army Corps for public display.

Pleistocene Camelid from Nevada. This project grew out of a paleontological resource assessment field survey. During the survey, a semi-articulated rear leg of a late Pleistocene camelid was collected and prepared. A manuscript was published in 2016.

Publications and Presentations

Shapiro, R. S., 2016, Camelid record of Mesquite Lake, California: impact of earliest Holocene climate change in Reynolds, R. E., ed., Going LOCO investigations along the Lower Colorado River, 2016 Desert Symposium Field Guide and Proceedings, p 41-47.

Shapiro, R. S. and Konhauser, K. O., 2014, Hematite-coated microfossils: Ecological fingerprint or taphonomic oddity of the Paleoproterozoic? Geobiology, v. 13, p. 209-224.

Shapiro, R. S. and Spangler, E., 2009, Bacterial fossil record in whale falls: relation of taphonomy and paleoecology to depositional environment: Palaeogeography, Palaeoclimatology, Palaeoecology, v. 274, p. 196-203.

Shapiro, R. S., Fricke, H., and Fox, K., 2009, Dinosaur-bearing oncoids from ephemeral lakes of the Lower Cretaceous Cedar Mountain Formation, Utah: PALAIOS, v. 24, p. 51-58.

Shapiro, R. S., and Rowland, S. M., 2002, Fossil collecting in southern Nevada in Rowland, S. M. and Orndorff, R. L., eds., Geology of the Southern Nevada Region: National Association of Geoscience Teachers, Far Western Section Spring Field Conference Guidebook, p. 96-99.

Shapiro, R. S., 1998, Paleogene-Early Neogene macrofossils of southwestern Santa Cruz Island in Weigand, P. W., ed., Contributions to the Geology of the Northern Channel Islands, Southern California: Pacific Section, American Association of Petroleum Geologists, MP-45, p. 123-132.



Michael Vader

Senior Associate

EDUCATION

BA, Physical Anthropology, University of California, Santa Barbara

M.A., Applied Archaeology (In Progress), California State University San Bernardino

13 YEARS OF EXPERIENCE

PROFESSIONAL AFFILIATIONS

Society for California Archaeology (SCA)

Society for American Archaeology (SAA)

Pacific Coast Archaeological Society (PCAS)

SPECIALIZED EXPERIENCE

Analysis of faunal remains including fish and shellfish species

Archaeological Monitoring

Paleontological Monitoring

Environmental Compliance Monitoring

Human osteology and bioarchaeology

Michael is cultural resources specialist with experience working on survey, data recovery, and monitoring projects. Michael has experience with project management, has led crews on multiple surveys and excavations, and is familiar with environmental compliance documents. He has worked on a variety of energy and water infrastructure projects throughout California, including projects in Riverside, San Diego, Imperial, San Bernardino, Los Angeles, Orange, Santa Barbara, San Luis Obispo, Kern, Fresno, Madera, and Inyo Counties, as well as in Clark County Nevada. Michael regularly works as part of a team, coordinating with field staff and agency leads.

Relevant Experience

San Gabriel Coastal Spreading Grounds Levee Retrofit Project, Pico Rivera, CA. *Archaeologist.* The Los Angeles County Department of Public Works retained ESA to prepare a cultural resources assessment for the San Gabriel Coastal Spreading Grounds (SGCSG) Levee Retrofit Project at the request of the Army Corps of Engineers in support of a 404 permit. The project will improve the stability and imperviousness of the SGCSG main levee, which is older than 50 years. ESA evaluated the levee for inclusion in the National Register and prepared an effects determination as part of the cultural resources assessment. Michael managed cultural resources staff and co-authored the cultural resources assessment.

Ventura Water Supply Projects, Ventura County, CA. *Project Manager.* The City of San Buenaventura (City) Water and Wastewater Department (Ventura Water) retained Environmental Science Associates to conduct a cultural resources assessment for the proposed Ventura Water Supply Projects in support of an Environmental Impact Report. The City is proposing to develop reliable potable water supplies for the population of the Ventura Water service area while at the same time complying with the Consent Decree among the City, Wishtoyo Foundation/Ventura Coastkeeper, and Heal the Bay. Michael managed cultural resources staff, led the survey, and authored the cultural resources assessment report.

Owens River Water Trail Project - Cultural Resources Assessment, Inyo County, CA. *Field Director.* The Water Department of Inyo County has retained Environmental Science Associates to prepare a cultural resources assessment for the Owens River Water Trail Project in support of an Environmental Impact Report. The proposed project would develop a recreational water trail along an approximately 6-mile-long stretch of the Owens River located east of Lone Pine Michael directed the cultural resources survey, and authored the cultural resources assessment report, and the Cultural Resources and Tribal Cultural Resources sections of the EIR.

DWR Pyramid Lake Maintenance Projects, Angeles National Forest, Los Angeles County, CA. *Archaeologist*. ESA was retained by the California Department of Water Resources to conduct a cultural resources study for improvements and repairs at three locations within the Pyramid Lake area in the Angeles National Forest. The Project includes the installation of a warning siren north of Frenchman's Flat Day Use Area, repairs to an existing bathroom at the Emigrant Landing swim beach, and revegetation at Los Alamos Campground Loops 3 and 4. Michael coordinated the cultural resources survey and prepared the archaeological resources report.

San Gabriel River Confluence with Cattle Canyon Improvements Project, Los Angeles National Forest, Los Angeles County, CA. *Archaeologist*. ESA has been retained by BlueGreen Consultants to prepare a joint EIS/R for the San Gabriel River Confluence with Cattle Canyon Improvements Project. The Project consists of recreational improvements and ecological restoration opportunities to address resource management challenges resulting from high public use of a 2.5-mile reach of the East Fork of the San Gabriel River, near its confluence with Cattle Canyon Creek in the Angeles National Forest. Michael led the cultural resources survey and prepared the Phase I cultural resources study report in support of the EIS/R.

DWR Castaic Lake Drawdown Project, Los Angeles County, CA. *Archaeologist.* DWR has drawn down the water level at Castaic Lake from its mean level at the 1,495-foot elevation contour to the 1,380-foot elevation contour as a result of State Water Project contractors borrowing water to meet their needs. Mitigation mandates the preparation of a Phase I cultural resources investigation if contractors borrow enough water to drawdown Castaic Lake to half its capacity. As such ESA was retained by DWR to conduct a Phase I cultural resources survey for the Castaic Lake Drawdown Project. Michael led the Phase I survey of the exposed shoreline around the lake and prepared the cultural resources survey report.

City of Los Angeles Department of Water and Power, Haskell Canyon Switching Station, Los Angeles County, CA. *Archaeologist.* ESA has prepared a Phase I cultural resources study for the Los Angeles Department of Water and Power (LADWP) Haskell Canyon Switching Station Project, located in Los Angeles County, CA. The proposed project includes the construction of the Haskell Canyon Switching Station on LADWP owned and private property south of the Angeles National Forest. Construction of the switching station would consist of clearing and upgrading of access roads, site grading and development, and installation of electrical conduits, structures, and equipment. Michael led the cultural resources survey and assisted in the preparation of the technical report.

Santa Clarita Valley Sanitation District, Chloride TMDL Facilities Plan Project, Santa Clarita, CA. *Archaeologist.* ESA archaeologists have prepared a Phase I cultural resources assessment and EIR cultural resources section for the Santa Clarita Valley Sanitation District Chloride TMDL Facilities Plan Project. The proposed project includes the construction of wastewater facilities, as well as pipeline expansions and upgrades within Los Angeles and Ventura Counties. Michael conducted archival research, facilitated Native American outreach, performed an archaeological survey of the project site, and contributed to the technical report and EIR cultural resources section.

APPENDIX B

LACM Records Search - Confidential

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Appendix J-1

Phase I Environmental Site Assessment Report

PARTNER
Engineering and Science, Inc.®



PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT

860 Sopp Road
Mojave California 93501

Report Date: December 7, 2020
Partner Project No. 20-299997.1



Prepared for:

Pacific Steel Group
4805 Murphy Canyon Road
San Diego, California 92123

PARTNER
Engineering and Science, Inc.

December 7, 2020

Eric Benson
Pacific Steel Group
4805 Murphy Canyon Road
San Diego, California 92123

Subject: Phase I Environmental Site Assessment
860 Sopp Road
Mojave California 93501
Partner Project No. 20-299997.1

Dear Mr. Benson:

Partner Engineering and Science, Inc. (Partner) is pleased to provide the results of the *Phase I Environmental Site Assessment* (Phase I ESA) report of the abovementioned address (the "subject property"). This assessment was performed in conformance with the scope and limitations as detailed in the ASTM Practice E1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.

This assessment included a site reconnaissance as well as research and interviews with representatives of the public, property ownership, site manager, and regulatory agencies. An assessment was made, conclusions stated, and recommendations outlined.

We appreciate the opportunity to provide environmental services to you. If you have any questions concerning this report, or if we can assist you in any other matter, please contact me at 310-765-7271.

Sincerely,

Lyly Churchill, MA
Relationship Manager

EXECUTIVE SUMMARY

Partner Engineering and Science, Inc. (Partner) has performed a Phase I Environmental Site Assessment (ESA) in accordance with the scope of work and limitations of ASTM Standard Practice E1527-13, the Environmental Protection Agency Standards and Practices for All Appropriate Inquiries (AAI) (40 CFR Part 312) and set forth by Pacific Steel Group for the property located at 860 Sopp Road in Mojave, Kern County, California (the "subject property"). The Phase I Environmental Site Assessment is designed to provide Pacific Steel Group with an assessment concerning environmental conditions (limited to those issues identified in the report) as they exist at the subject property.

Property Description

The subject property is located on the south side of Sopp Road between Sierra Highway and 10th Street West within a mixed commercial and undeveloped area of Kern County. Please refer to the table below for further description of the subject property:

Subject Property Data	
Address:	860 Sopp Road, Mojave, California
Property Use:	Undeveloped land/Storage
Land Acreage (Ac):	174 Ac
Number of Buildings:	None
Assessor's Parcel Number (APN):	431-010-02 (Parcel A); 431-030-02 (Parcel B)
Site Assessment Performed By:	Nathaniel Grondin of Partner
Site Assessment Conducted On:	November 20, 2020

The subject property is generally vacant and undeveloped; no permanent structures are on the property. A small section on the northern portion of the subject property is utilized for vehicle storage and livestock holding. Onsite operations were limited to seasonal agricultural use. An irrigation well is present on the northern portion of the property.

According to available historical sources, the subject property was occupied by a small, unidentified structure in the northern portion along Sopp Road from circa 1915 to 1917 and was undeveloped from at least 1943 to 2016.

The immediately surrounding properties consist of Shemshad Food Products, Inc to the north across Sopp Road; undeveloped land to the south; Edward's Air Force Base to the east across 10th Street West; and undeveloped land to the west across a railroad easement and Sierra Highway.

According to a previous subsurface investigation conducted on a nearby property (Mojave Airport aka Former Marine Corps Air Station - UST #1 and Case #T0602938829), the depth of groundwater in the vicinity of the subject property was reported to be approximately 238 to 350 feet below ground surface (bgs) and groundwater flow is inferred to be toward the east-northeast.

Findings

A *REC* refers to the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: due to release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment.

- Partner did not identify any recognized environmental conditions during the course of this assessment.

A *CREC* refers to a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.

- Partner did not identify any controlled recognized environmental conditions during the course of this assessment.

A *HREC* refers to a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls.

- Partner did not identify any historical recognized environmental conditions during the course of this assessment.

An *environmental issue* refers to environmental concerns identified by Partner, which do not qualify as RECs; however, warrant further discussion.

- Partner did not identify any environmental issues during the course of this assessment.

Conclusions, Opinions and Recommendations

Partner has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527-13 of 860 Sopp Road in Mojave, Kern County, California (the "subject property"). Any exceptions to, or deletions from, this practice are described in Section 1.5 of this report.

This assessment has revealed no evidence of recognized environmental conditions or environmental issues in connection with the subject property. Based on the conclusions of this assessment, Partner recommends no further investigation of the subject property at this time.

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1.0 INTRODUCTION

Partner Engineering and Science, Inc. (Partner) has performed a Phase I Environmental Site Assessment (ESA) in conformance with the scope and limitations of ASTM Standard Practice E1527-13 and the Environmental Protection Agency Standards and Practices for All Appropriate Inquiries (AAI) (40 CFR Part 312) for the property located at 860 Sopp Road in Mojave, Kern County, California (the "subject property"). Any exceptions to, or deletions from, this scope of work are described in the report.

1.1 Purpose

The purpose of this ESA is to identify existing or potential Recognized Environmental Conditions (as defined by ASTM Standard E1527-13) affecting the subject property that: 1) constitute or result in a material violation or a potential material violation of any applicable environmental law; 2) impose any material constraints on the operation of the subject property or require a material change in the use thereof; 3) require clean-up, remedial action or other response with respect to Hazardous Substances or Petroleum Products on or affecting the subject property under any applicable environmental law; 4) may affect the value of the subject property; and 5) may require specific actions to be performed with regard to such conditions and circumstances. The information contained in the ESA Report will be used by Client to: 1) evaluate its legal and financial liabilities for transactions related to foreclosure, purchase, sale, loan origination, loan workout or seller financing; 2) evaluate the subject property's overall development potential, the associated market value and the impact of applicable laws that restrict financial and other types of assistance for the future development of the subject property; and/or 3) determine whether specific actions are required to be performed prior to the foreclosure, purchase, sale, loan origination, loan workout or seller financing of the subject property.

This ESA was performed to permit the *User* to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on scope of Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 U.S.C. §9601) liability (hereinafter, the "*landowner liability protections*," or "*LLPs*"). ASTM Standard E1527-13 constitutes "*all appropriate inquiry* into the previous ownership and uses of the *property* consistent with good commercial or customary practice" as defined at 42 U.S.C. §9601(35)(B).

1.2 Scope of Work

The scope of work for this ESA is in accordance with the requirements of ASTM Standard E1527-13. This assessment included: 1) a property and adjacent site reconnaissance; 2) interviews with key personnel; 3) a review of historical sources; 4) a review of regulatory agency records; and 5) a review of a regulatory database report provided by a third-party vendor. Partner contacted local agencies, such as environmental health departments, fire departments and building departments in order to determine any current and/or former hazardous substances usage, storage and/or releases of hazardous substances on the subject property. Additionally, Partner researched information on the presence of activity and use limitations (AULs) at these agencies. As defined by ASTM E1527-13, AULs are the legal or physical restrictions or limitations on the use of, or access to, a site or facility: 1) to reduce or eliminate potential exposure to hazardous substances or petroleum products in the soil or groundwater on the subject property; or 2) to prevent activities that could interfere with the effectiveness of a response action, in

order to ensure maintenance of a condition of no significant risk to public health or the environment. These legal or physical restrictions, which may include institutional and/or engineering controls (IC/ECs), are intended to prevent adverse impacts to individuals or populations that may be exposed to hazardous substances and petroleum products in the soil or groundwater on the property.

If requested by Client, this report may also include the identification, discussion of, and/or limited sampling of asbestos-containing materials (ACMs), lead-based paint (LBP), mold, and/or radon.

1.3 Limitations

Partner warrants that the findings and conclusions contained herein were accomplished in accordance with the methodologies set forth in the Scope of Work. These methodologies are described as representing good commercial and customary practice for conducting an ESA of a property for the purpose of identifying recognized environmental conditions. There is a possibility that even with the proper application of these methodologies there may exist on the subject property conditions that could not be identified within the scope of the assessment or which were not reasonably identifiable from the available information. Partner believes that the information obtained from the record review and the interviews concerning the subject property is reliable. However, Partner cannot and does not warrant or guarantee that the information provided by these other sources is accurate or complete. The conclusions and findings set forth in this report are strictly limited in time and scope to the date of the evaluations. The conclusions presented in the report are based solely on the services described therein, and not on scientific tasks or procedures beyond the scope of agreed-upon services or the time and budgeting restraints imposed by the Client. No other warranties are implied or expressed.

Some of the information provided in this report is based upon personal interviews, and research of available documents, records, and maps held by the appropriate government and private agencies. This report is subject to the limitations of historical documentation, availability, and accuracy of pertinent records, and the personal recollections of those persons contacted.

This practice does not address requirements of any state or local laws or of any federal laws other than the all appropriate inquiry provisions of the LLPs. Further, this report does not intend to address all of the safety concerns, if any, associated with the subject property.

Environmental concerns, which are beyond the scope of a Phase I ESA as defined by ASTM include the following: ACMs, LBP, radon, and lead in drinking water. These issues may affect environmental risk at the subject property and may warrant discussion and/or assessment; however, are considered non-scope issues. If specifically requested by the Client, these non-scope issues are discussed in Section 6.3.

1.4 User Reliance

Pacific Steel Group engaged Partner to perform this assessment in accordance with an agreement governing the nature, scope and purpose of the work as well as other matters critical to the engagement. All reports, both verbal and written, are for the sole use and benefit of Pacific Steel Group. Either verbally or in writing, third parties may come into possession of this report or all or part of the information generated as a result of this work. In the absence of a written agreement with Partner granting such rights, no third parties shall have rights of recourse or recovery whatsoever under any course of action against Partner, its officers, employees, vendors, successors or assigns. Any such unauthorized user shall

be responsible to protect, indemnify and hold Partner, Client and their respective officers, employees, vendors, successors and assigns harmless from any and all claims, damages, losses, liabilities, expenses (including reasonable attorneys' fees) and costs attributable to such Use. Unauthorized use of this report shall constitute acceptance of and commitment to these responsibilities, which shall be irrevocable and shall apply regardless of the cause of action or legal theory pled or asserted. Additional legal penalties may apply.

1.5 Limiting Conditions

The findings and conclusions contain all of the limitations inherent in these methodologies that are referred to in ASTM E1527-13.

Specific limitations and exceptions to this ESA are more specifically set forth below:

- Interviews with past or current owners, operators and occupants were not reasonably ascertainable and thus constitute a data gap. Based on information obtained from other historical sources (as discussed in Section 3.0), this data gap is not expected to alter the findings of this assessment.
- Partner requested information relative to deed restrictions and environmental liens, a title search, and completion of the AAI User Questionnaire from the Report User. This information was not provided at the time of the assessment.
- Partner's view of the ground during the site assessment was obstructed due to excessive storage on the north portion of the property. However, given the nature of the materials stored, mainly pallets and other various wood scraps, automobile transmissions, tires, and doors, the lack of agency records indicative of the storage/use of significant quantities of hazardous substances or underground storage tanks (USTS), and the historic use of the subject property (undeveloped), this limitation is not expected to alter the overall findings of this assessment.

2.0 SITE DESCRIPTION

2.1 Site Location and Legal Description

The subject property at 860 Sopp Road in Mojave, California is located on the south side of Sopp Road between Sierra Highway and 10th Street West. According to the Kern County Assessor, the subject property is legally described as *SECTION 27 TOWNSHIP 10 RANGE 12*, and ownership is currently vested in Trade Trans Tech Inc since 2017.

Please refer to Figure 1: Site Location Map, Figure 2: Site Plan, Figure 3: Topographic Map, and Appendix A: Site Photographs for the location and site characteristics of the subject property.

2.2 Current Property Use

The subject property is generally vacant and undeveloped; no permanent structures are on the property. A small section on the northern portion of the subject property is utilized for vehicle storage and livestock holding. Onsite operations were limited to seasonal agricultural use. An irrigation well is present on the northern portion of the property.

The subject property is designated for agricultural development by Kern County.

The subject property was not identified in the regulatory database report of Section 4.2.

2.3 Current Use of Adjacent Properties

The subject property is located within a mixed commercial and undeveloped area of Kern County. During the vicinity reconnaissance, Partner observed the following land use on properties in the immediate vicinity of the subject property:

Immediately Surrounding Properties

North: Sopp Road beyond which is Shemshad Food Products, Inc (749 Sopp Road) and Desert Block Co. Inc (929 Sopp Road)

South: Undeveloped land

East: 10th Street West beyond which is an undeveloped portion of Edward's Airforce Base (the nearest facility being approximately 10 miles to the east)

West: A railroad easement and Sierra Highway beyond which is undeveloped land

The adjacent property to the east was identified as a Department of Defense (DOD) site in the regulatory database report of Section 4.2.

2.4 Physical Setting Sources

2.4.1 Topography

The United States Geological Survey (USGS) *Soledad Mountain, California* Quadrangle 7.5-minute series topographic map was reviewed for this ESA. According to the contour lines on the topographic map, the subject property is located at approximately 2550 to 2560 feet above mean sea level (MSL). The contour lines in the area of the subject property indicate the area is sloping gently toward the northeast. The subject property is depicted on the 2012 map without structures or additional details.

A copy of the most recent topographic map is included as Figure 3 of this report.

2.4.2 Hydrology

According to topographic map interpretation, the direction of groundwater flow in the vicinity of the subject property is inferred to be toward the northeast. The nearest surface water in the vicinity of the subject property are sewage treatment ponds located approximately 6 miles northwest of the subject property. No settling ponds, lagoons, surface impoundments, wetlands, or natural catch basins were observed at the subject property during this assessment.

According to available information, a public water system operated by the Mojave Public Utility District (MPUD) serves the subject property vicinity. According the MPUD, shallow groundwater beneath the subject property is not utilized for domestic purposes. The sources of public water for the MPUD are surface water from the State Water Project and groundwater.

According to a previous subsurface investigation conducted on a nearby property (Mojave Airport aka Former Marine Corps Air Station - UST #1 and Case #T0602938829), the depth of groundwater in the vicinity of the subject property was reported to be approximately 238 to 350 feet below ground surface (bgs).

2.4.3 Geology/Soils

The subject property is situated within the Antelope Valley of the Mojave Desert geomorphic province of the State of California. The uppermost geologic formation underlying the soils at the subject property is the Quaternary Age alluvium. The alluvium comprises the underlying stratigraphy and consists mostly of gravel, sand, silt and clay deposited in alluvial fan, lake, and stream channel environments. The thickness of the alluvium is estimated to be over 2,000 feet. The alluvium is underlain by the Cenozoic volcanic and igneous rocks.

Based on information obtained from the United Stated Department of Agriculture (USDA) Natural Resources Conservation Service Web Soil Survey online database, the subject property is mapped as Garlock loamy sand. The Garlock series consists of very deep, well drained, loamy sand; sandy clay loam; sandy loam; gravelly loamy sand; and very gravelly loamy sand. These soils are on broad alluvial fans. Slopes range from 2 to 9 percent.

2.4.4 Flood Zone Information

Partner performed a review of the Flood Insurance Rate Map, published by the Federal Emergency Management Agency. According to Community Panel Number 06029C3675E, dated September 26, 2006, the subject property appears to be located in Zone X, an area located outside of the 100-year and 500-year flood plains.

A copy of the reviewed flood map is not included in Appendix B of this report.

3.0 HISTORICAL INFORMATION

Partner obtained historical use information about the subject property from a variety of sources. A chronological listing of the historical data found is summarized in the table below:

Historical Use Information		
Period/Date	**Source**	**Description/Use**
1915-1917	Topographic Maps	Small structure
1943-2016	Aerial Photographs, Topographic Maps, Interviews	Undeveloped Land
Present	Onsite Observations, Interviews	Undeveloped Land and nursery, vehicle/auto parts storage, livestock holding

According to available historical sources, the subject property was occupied by a small, unidentified structure in the northern portion along Sopp Road from circa 1915 to 1917 and was undeveloped from at least 1943 to 2016. No potential environmental concerns were identified in association with the current or former use of the subject property.

3.1 Aerial Photograph Review

Partner obtained available aerial photographs of the subject property and surrounding area from Environmental Data Resources (EDR) on November 16, 2020. The following was observed on the subject property and adjacent properties during the aerial photograph review:

Date: 1973, 1987	*Scale: 1"=500'*
Subject Property:	Appears to be undeveloped land
North:	Appears to be developed with a small structure and outbuildings across Sopp Road
South:	Appears to be undeveloped land
East:	Appears to be undeveloped across 10th Street West
West:	Appears to be developed with a small structure Sierra Highway; Razed by 1987

Date: 1994, 2005	*Scale: 1"=500'*
Subject Property:	No significant changes visible
North:	Developed with small structures and what appears to be a lumber yard across Sopp Road
South:	No significant changes visible
East:	No significant changes visible
West:	No significant changes visible

Date: 2009, 2012, 2016	*Scale: 1"=500'*
Subject Property:	No significant changes visible
North:	Developed with a lumber yard and commercial structures across Sopp Road
South:	No significant changes visible
East:	No significant changes visible
West:	No significant changes visible

Copies of select aerial photographs are included in Appendix B of this report.

3.2 Fire Insurance Maps

Sanborn map coverage was not available for the subject property.

A copy of the *Certified Sanborn Map Report* is included in Appendix B of this report.

3.3 City Directories

Partner reviewed historical city directories obtained from EDR on November 23, 2020 for past names and businesses that were listed for the subject property and adjacent properties. The findings are presented in the following table:

City Directory Search for 860 Sopp Road (Subject Property)	
Year(s)	**Occupant Listed**
1992-2014	No Listings

Based on the city directory review, no environmentally sensitive listings were identified for the subject property addresses.

City Directory Search for Adjacent Properties	
Year(s)	**Occupant Listed**
1992	Sheldon Block & Concrete (929 Sopp Road)
1995	Desert Block Co (929 Sopp Road)
2005	Desert Block Co (929 Sopp Road)
2010	Desert Block Co (929 Sopp Road)
2014	Desert Block Co (929 Sopp Road)

Based on the city directory review, no environmentally sensitive listings were identified for the adjacent property addresses.

Copies of reviewed city directories are included in Appendix B of this report.

3.4 Historical Topographic Maps

Partner reviewed historical topographic maps obtained from EDR on November 16, 2020. The following was observed on the subject property and adjacent properties during the topographic map review:

Date: 1915, 1917	
Subject Property:	A small structure is depicted on the north portion of the subject property
North:	Depicted with a structure across a roadway
South:	Depicted without structures or further details
East:	Depicted without structures or further details
West:	A roadway and a railroad easement are depicted followed by undeveloped land

Date: 1943	
Subject Property:	Depicted without structure or further details
North:	Depicted with a small structure and a retention pond across a roadway
South:	No significant changes depicted
East:	No significant changes depicted
West:	Depicted with a small structure across railroad tracks and a roadway

Date: 1947	
Subject Property:	No significant changes depicted
North:	Depicted with five structures across a paved roadway
South:	No significant changes depicted
East:	No significant changes depicted
West:	Depicted with three structures across a railroad easement and a roadway

Date: 1956	
Subject Property:	No significant changes depicted
North:	Depicted with one small structure and a water tower across a roadway
South:	No significant changes depicted
East:	No significant changes depicted
West:	Depicted with one small structure across railroad tracks and a roadway

Date: 1973	
Subject Property:	No significant changes depicted
North:	Depicted with a small structure across a paved roadway
South:	No significant changes depicted
East:	"Flight Test Center Air Force Base" is depicted
West:	Depicted without structure or further details

Date: 2012	
Subject Property:	Depicted without structures or further details
North:	Depicted without structures or further details
South:	Depicted without structures or further details
East:	Depicted without structures or further details
West:	Depicted without structures or further details

Copies of reviewed topographic maps are included in Appendix B of this report.

4.0 REGULATORY RECORDS REVIEW

4.1 Regulatory Agencies

4.1.1 State Department

Regulatory Agency Data	
Name of Agency:	California Environmental Protection Agency (CalEPA)
Agency Address:	1001 I Street, Sacramento, California
Agency Phone Number:	(926) 323-2514
Date of Contact:	November 16, 2020
Method of Communication:	Online
Summary of Communication:	The CalEPA manages the following State agencies: Air Resources Board (ARB), Department of Resources Recycling and Recovery (CalRecycle), Department of Pesticide Regulation (DPR), Department of Toxic Substances Control (DTSC), Office of Environmental Health Hazard Assessment (OEHHA), and the State Water Resources Control Board (SWRCB). These agencies are discussed individually, where applicable, in the following sections. The subject property was not identified for records maintained by CalRecycle, for pesticides with the DPR databases, or for hazardous substance risk evaluation by the OEHHA. No records regarding hazardous substance use, storage or releases, or the presence of USTs and AULs on the subject property were on file with the CalEPA.

4.1.2 Health Department

Regulatory Agency Data	
Name of Agency:	Kern County Environmental Health Services Department (KCEHSD)
Agency Address:	2700 M Street, Suite 300, Bakersfield, California
Agency Phone Number:	(661) 862-8740
Date of Contact:	November 23, 2020
Method of Communication:	Online
Summary of Communication:	No records regarding hazardous substance use, storage or releases, or the presence of USTs and AULs on the subject property were on file with the KCEHSD.

4.1.3 Fire Department

Regulatory Agency Data	
Name of Agency:	Kern County Fire Department (KCFD)
Agency Address:	5642 Victor Street, Bakersfield, California
Agency Phone Number:	(661) 391-7000
Date of Contact:	November 30, 2020
Method of Communication:	Telephone
Summary of Communication:	No records regarding hazardous substance use, storage or releases, or the presence of USTs and AULs on the subject property were on file with the KCFD.

4.1.4 Air Pollution Control Agency

Regulatory Agency Data	
Name of Agency:	Mojave Desert Air Quality Management District (AQMD)
Agency Address:	14306 Park Avenue, Victorville, California
Agency Phone Number:	(760) 245-1661
Date of Contact:	November 30, 2020
Method of Communication:	Online
Summary of Communication:	No Permits to Operate (PTO), Notices of Violation (NOV), or Notices to Comply (NTC) or the presence of AULs, dry cleaning machines, or USTs were on file for the subject property with the AQMD.

4.1.5 Regional Water Quality Agency

Regulatory Agency Data	
Name of Agency:	Lahontan Regional Water Quality Control Board (LRWQCB)
Point of Contact:	Online
Agency Address:	15095 Amargosa Road, Bldg. 2, Suite 210, Victorville, California
Agency Phone Number:	(760) 241-6583
Date of Contact:	November 20, 2020
Method of Communication:	Online (https://geotracker.waterboards.ca.gov/)
Summary of Communication:	No records regarding hazardous substance use, storage or releases, or the presence of USTs and AULs on the subject property were on file with the RWQCB.

4.1.6 Department of Toxic Substances Control

Regulatory Agency Data	
Name of Agency:	California Department of Toxic Substances Control (DTSC)
Point of Contact:	DTSC EnviroStor Database
Agency Address:	9211 Oakdale Avenue, Chatsworth, California
Date of Contact:	November 20, 2020
Method of Communication:	Online
Summary of Communication:	No records regarding hazardous substance use, storage or releases, or the presence of USTs and AULs on the subject property were on file with the DTSC.

4.1.7 Building Department

Regulatory Agency Data	
Name of Agency:	Kern County Engineering and Survey Services Department, Building Inspection Division (BID)
Agency Address:	2700 M Street, Bakersfield, California
Agency Phone Number:	(661) 862-5075
Date of Contact:	November 20, 2020
Method of Communication:	Online
Summary of Communication:	Building permit records are recorded with the Kern County Assessor, which posts the permit information on the Assessor's website. No records of permits were found for the subject property APNs on the Kern County Assessor's website.

4.1.8 Planning Department

Regulatory Agency Data	
Name of Agency:	Kern County Geographic Information Systems
Agency Address:	2700 M Street, Bakersfield, California
Agency Phone Number:	(661) 862-5075
Date of Contact:	November 30, 2020
Method of Communication:	Online
Summary of Communication:	According to records reviewed, the subject property is zoned for agricultural development by Kern County.

4.1.9 Oil & Gas Exploration

Regulatory Agency Data	
Name of Agency:	California Geologic Energy Management Division (CalGEM)
Point of Contact:	CalGEM Well Finder Database
Agency Address:	4800 Stockdale Highway #100, Bakersfield, California
Date of Contact:	November 20, 2020

Regulatory Agency Data	
Method of Communication:	Online (www.conservation.ca.gov/calgem/Pages/WellFinder.aspx)
Summary of Communication:	According to CalGEM, no oil or gas wells are located on or adjacent to the subject property.

4.1.10 Assessor's Office

Regulatory Agency Data	
Name of Agency:	Kern County Assessor
Agency Address:	1115 Truxtun Avenue, Bakersfield, California
Agency Phone Number:	(661) 868-3485
Date of Contact:	November 30, 2008
Method of Communication:	Online (http://assessor.co.kern.ca.us/)
Summary of Communication:	According to records reviewed, the subject property is identified by Assessor Parcel Numbers (APNs) 431-010-02 and 431-030-02. The parcels total 174 acres.

4.2 Mapped Database Records Search

Information from standard federal, state, county, and city environmental record sources was provided by Environmental Data Resources, Inc. (EDR). Data from governmental agency lists are updated and integrated into one database, which is updated as these data are released. The information contained in this report was compiled from publicly available sources and the locations of the sites are plotted utilizing a geographic information system, which geocodes the site addresses. The accuracy of the geocoded locations is approximately +/-300 feet.

Using the ASTM definition of migration, Partner considers the migration of hazardous substances or petroleum products in any form onto the subject property during the evaluation of each site listed on the radius report, which includes solid, liquid, and vapor.

4.2.1 Regulatory Database Summary

Radius Report Data

Database	Search Radius (mile)	Subject Property	Adjacent Properties	Sites of Concern
Federal NPL or Delisted NPL Site	1.00	N	N	N
Federal CERCLIS Site	0.50	N	N	N
Federal CERCLIS-NFRAP Site	0.50	N	N	N
Federal RCRA CORRACTS Facility	1.00	N	N	N
Federal RCRA TSDF Facility	0.50	N	N	N
Federal RCRA Generators Site (LQG, SQG, CESQG)	0.25	N	N	N
Federal IC/EC Registries	0.50	N	N	N
Federal ERNS Site	Subject Property	N	N	N
State/Tribal Equivalent NPL	1.00	N	N	N
State/Tribal Equivalent CERCLIS	1.00	N	N	N
State/Tribal Landfill/Solid Waste Disposal Site	0.50	N	N	N
State/Tribal Leaking Storage Tank Site	0.50	N	N	N
State/Tribal Registered Storage Tanks (UST/AST)	0.25	N	N	N

Radius Report Data				
Database	**Search Radius (mile)**	**Subject Property**	**Adjacent Properties**	**Sites of Concern**
State/Tribal Voluntary Cleanup Sites (VCP)	0.50	N	N	N
State/Tribal Spills	0.50	N	N	N
Federal Brownfield Sites	0.50	N	N	N
State Brownfield Sites	0.50	N	N	N
DOD	1.00	N	**Y**	N
EDR MGP	Varies	N	N	N
EDR US Hist Auto Station	Varies	N	N	N
EDR US Hist Cleaners	Varies	N	N	N

4.2.2 Subject Property Listings

The subject property is not identified in the regulatory database report.

4.2.3 Adjacent Property Listings

The adjacent property to the east is identified as a DOD site in the regulatory database report, as discussed below:

- The property identified as Edward's Air Force base is located adjacent to the east of the subject property. Edwards Airforce Base was constructed in 1933 as the Air Force Materiel Command center for conducting and supporting research and development of flight, as well as testing and evaluating aerospace systems from concept to combat. It also hosts many test activities conducted by America's commercial aerospace industry. Though the boundary of the air force base sits adjacent to the east of the subject property, the nearest structures associated with the base are located 10 miles to the east. The portion of the base immediately adjacent to the subject property is currently being developed with a solar farm.

  This site is also associated with additional listings for more distant current and former base operations. According to EPA's Superfund Site webpage for this Edward's Air Force, spills and poor disposal practices have resulted in the release of volatile organic compounds (VOCs), metals and other chemicals to the surface, subsurface, and groundwater. The removal of drums, tanks and contaminated soils reduced the potential of exposure to hazardous substances and limited the sources of contamination at the base while investigations were taking place and cleanup activities were being planned. Drinking water wells on the base are not impacted by contamination and are continually tested to ensure the water is compliance with all drinking water standards. Lancaster, Boron, and other small communities are located miles away from base operations and are not impacted by contamination on the base. Indoor air in some buildings located above or near VOC-contaminated media is under investigation to ensure base workers are not exposed to contamination from vapor intrusion. Some surface water is threatened by seeps of trichloroethene (TCE)-contaminated groundwater in the AFRL. Some operable units (OUs) currently have groundwater and/or soil vapor extraction and treatment, with ongoing monitoring and reporting; however, EPA has certified that groundwater migration is under control.

Based on the regulatory oversight and distance to the impacted media, these listings are not expected to represent a significant environmental concern and it is unlikely that a regulatory file review for this site would alter the findings of this assessment.

Based on the findings, vapor migration is not expected to represent a significant environmental concern at this time.

4.2.4 Sites of Concern Listings

No sites of concern are identified in the regulatory database report.

4.2.5 Orphan Listings

No orphan listings of concern are identified in the regulatory database report.

A copy of the regulatory database report is included in Appendix C of this report.

5.0 USER PROVIDED INFORMATION AND INTERVIEWS

In order to qualify for one of the *Landowner Liability Protections (LLPs)* offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the *Brownfields Amendments*), the *User* must conduct the following inquiries required by 40 CFR 312.25, 312.28, 312.29, 312.30, and 312.31. The *User* should provide the following information to the *environmental professional*. Failure to provide this information could result in a determination that *all appropriate inquiries* is not complete. The *User* is asked to provide information or knowledge of the following:

- Review Title and Judicial Records for Environmental Liens and AULs
- Specialized Knowledge or Experience of the User
- Actual Knowledge of the User
- Reason for Significantly Lower Purchase Price
- Commonly Known or *Reasonably Ascertainable* information
- Degree of Obviousness
- Reason for Preparation of this Phase I ESA

Fulfillment of these user responsibilities is key to qualification for the identified defenses to CERCLA liability. Partner requested our Client to provide information to satisfy User Responsibilities as identified in Section 6 of the ASTM guidance.

Pursuant to ASTM E1527-13, Partner requested the following site information from Pacific Steel Group (User of this report).

User Responsibilities				
Item	**Provided By User**	**Not Provided By User**	**Discussed Below**	**Does Not Apply**
AAI User Questionnaire			**X**	
Title Records, Environmental Liens, and AULs			**X**	
Specialized Knowledge			**X**	
Actual Knowledge			**X**	
Valuation Reduction for Environmental Issues			**X**	
Identification of Key Site Manager	**Section 5.1.3**			
Reason for Performing Phase I ESA	**Section 1.1**			
Prior Environmental Reports		**X**		
Other		**X**		

5.1 Interviews

5.1.1 Interview with Owner

Mr. Mike Movsessyan, subject property owner, was not aware of any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the subject property; any pending, threatened, or past administrative proceedings relevant to hazardous substances or

petroleum products in, on, or from the subject property; or any notices from a governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products.

5.1.2 Interview with Report User

Please refer to Section 5.2 below for information requested from the Report User. The information requested was not received prior to the issuance of this report.

5.1.3 Interview with Key Site Manager

A key site manager was not available to be interviewed at the time of this assessment.

5.1.4 Interviews with Past Owners, Operators and Occupants

Interviews with past owners, operators and occupants were not conducted since information regarding the potential for contamination at the subject property was obtained from other sources.

5.1.5 Interview with Others

As the subject property is not an abandoned property as defined in ASTM 1527-13, interview with others were not performed.

5.2 User Provided Information

5.2.1 Title Records, Environmental Liens, and AULs

Partner was not provided with title records or environmental lien and AUL information for review as part of this assessment.

5.2.2 Specialized Knowledge

No specialized knowledge of environmental conditions associated with the subject property was provided by the User at the time of the assessment.

5.2.3 Actual Knowledge of the User

No actual knowledge of any environmental lien or AULs encumbering the subject property or in connection with the subject property was provided by the User at the time of the assessment.

5.2.4 Valuation Reduction for Environmental Issues

No knowledge of valuation reductions associated with the subject property was provided by the User at the time of the assessment.

5.2.5 Commonly Known or Reasonably Ascertainable Information

The User did not provide information that is commonly known or *reasonably ascertainable* within the local community about the subject property at the time of the assessment.

5.2.6 Previous Reports and Other Provided Documentation

No previous reports or other pertinent documentation was provided to Partner for review during the course of this assessment.

6.0 SITE RECONNAISSANCE

The weather at the time of the site visit was sunny and clear. Refer to Section 1.5 for limitations encountered during the field reconnaissance and Sections 2.1 and 2.2 for subject property operations. The table below provides the site assessment details:

Site Assessment Data	
Site Assessment Performed By:	Nathaniel Grondin
Site Assessment Conducted On:	November 20, 2020

The table below provides the subject property personnel interviewed during the field reconnaissance:

Site Visit Personnel for 860 Sopp Road (Subject Property)			
Name	**Title/Role**	**Contact Number**	**Site Walk* Yes/No**
Mr. Mike Movsessyan	Owner	(323) 687-1000	Yes

* Accompanied Partner during the field reconnaissance activities and provided information pertaining to the current operations and maintenance of the subject property

No potential environmental concerns were identified during the onsite reconnaissance.

6.1 General Site Characteristics

6.1.1 Solid Waste Disposal

No solid waste was observed generated at the subject property.

Some evidence of illegal dumping of solid waste was observed during the Partner site reconnaissance. The waste was mainly roofing materials such as asphalt shingles and household waste. According to the subject property owner, waste that is illegally dumped at the subject property is collected by employees and transported to a nearby garbage dump. Illegal dumping of hazardous substances was not observed at the subject property.

6.1.2 Sewage Discharge and Disposal

Since no habitable structures are present on the subject property, no sanitary discharges on the subject property were observed. No wastewater treatment facilities or septic systems are observed or reported on the subject property.

6.1.3 Surface Water Drainage

Storm water either infiltrates the pervious ground or is removed by sheet flow action across the unpaved, natural ground surface towards topographically lower areas.

The subject property does not appear to be a designated wetland area, based on information obtained from the United States Fish & Wildlife Service; however, a comprehensive wetlands survey would be required in order to formally determine actual wetlands on the subject property. No surface impoundments, wetlands, natural catch basins, settling ponds, or lagoons are located on the subject property. No drywells were identified on the subject property.

6.1.4 Source of Heating and Cooling

No heating or cooling systems, or domestic hot water equipment, are operated on the subject property.

6.1.5 Wells and Cisterns

One irrigation well was noted on the north portion of the subject property.

6.1.6 Wastewater

No domestic wastewater is generated at the subject property. No industrial process is performed at the subject property.

6.1.7 Septic Systems

No septic systems were observed or reported on the subject property.

6.1.8 Additional Site Observations

No additional general site characteristics were observed during the site reconnaissance.

6.2 Potential Environmental Hazards

6.2.1 Hazardous Substances and Petroleum Products Used or Stored at the Site

Partner identified hazardous substances used, stored, and/or generated on the subject property as noted in the following table:

Hazardous Substances and/or Petroleum Products Noted Onsite				
Substance	**Container Size**	**Location**	**Nature of Use**	**Disposal Method**
Bar and Chain Oil	1x 55-gallon drum	Northern portion of the subject property	Agricultural equipment	Used onsite

The materials were found to be properly labeled at the time of the assessment with no signs of leaks, stains, or spills. Secondary containment is not provided. Based on the nature of use, overall small quantities observed, these materials are not expected to represent a significant environmental concern.

6.2.2 Aboveground & Underground Hazardous Substance or Petroleum Product Storage Tanks (ASTs/USTs)

No evidence of current or former ASTs or USTs was observed during the site reconnaissance with the exception of several empty water ASTs associated with agricultural operations at the subject property.

6.2.3 Evidence of Releases

No spills, stains or other indications that a surficial release has occurred at the subject property were observed.

6.2.4 Polychlorinated Biphenyls (PCBs)

No potential PCB-containing equipment (transformers, oil-filled switches, hoists, lifts, dock levelers, hydraulic elevators, etc.) was observed on the subject property during Partner's reconnaissance.

6.2.5 Strong, Pungent or Noxious Odors

No strong, pungent or noxious odors were evident during the site reconnaissance.

6.2.6 Pools of Liquid

No pools of liquid were observed on the subject property during the site reconnaissance.

6.2.7 Drains, Sumps and Clarifiers

No drains, sumps, or clarifiers, other than those associated with storm water removal, were observed on the subject property during the site reconnaissance.

6.2.8 Pits, Ponds and Lagoons

No pits, ponds or lagoons were observed on the subject property.

6.2.9 Stressed Vegetation

No stressed vegetation was observed on the subject property.

6.2.10 Additional Potential Environmental Hazards

No additional environmental hazards, including landfill activities or radiological hazards, were observed.

6.3 Non-ASTM Services

6.3.1 Asbestos-Containing Materials (ACMs)

Asbestos is the name given to a number of naturally occurring, fibrous silicate minerals mined for their useful properties such as thermal insulation, chemical and thermal stability, and high tensile strength. The Occupational Safety and Health Administration (OSHA) regulation 29 CFR 1926.1101 requires certain construction materials to be *presumed* to contain asbestos, for purposes of this regulation. All thermal system insulation (TSI), surfacing material, and asphalt/vinyl flooring that are present in a building constructed prior to 1981 and have not been appropriately tested are "presumed asbestos-containing material" (PACM).

Due to the undeveloped nature of the subject property, ACMs were not considered within the scope of this assessment.

6.3.2 Lead-Based Paint (LBP)

Lead is a highly toxic metal that affects virtually every system of the body. LBP is defined as any paint, varnish, stain, or other applied coating that has 1 mg/cm^2 (or 5,000 ug/g or 0.5% by weight) or more of lead. Congress passed the Residential Lead-Based Paint Hazard Reduction Act of 1992, also known as "Title X", to protect families from exposure to lead from paint, dust, and soil. Under Section 1017 of Title X, intact LBP on most walls and ceilings is not considered a "hazard," although the condition of the paint should be monitored and maintained to ensure that it does not become deteriorated. Further, Section 1018 of this law directed the Housing and Urban Development (HUD) and the US EPA to require the disclosure of known information on LBP and LBP hazards before the sale or lease of most housing built before 1978.

Due to the undeveloped nature of the subject property, LBP was not considered within the scope of this assessment.

6.3.3 Radon

Radon is a colorless, odorless, naturally occurring, radioactive, inert, gaseous element formed by radioactive decay of radium (Ra) atoms. The US EPA has prepared a map to assist National, State, and local organizations to target their resources and to implement radon-resistant building codes. The map divides the country into three Radon Zones, according to the table below:

EPA Radon Zones		
EPA Zones	**Average Predicted Radon Levels**	**Potential**
Zone 1	Exceed 4.0 pCi/L	Highest
Zone 2	Between 2.0 and 4.0 pCi/L	Moderate
Zone 3	Less than 2.0 pCi/L	Low

It is important to note that the EPA has found homes with elevated levels of radon in all three zones, and the US EPA recommends site-specific testing in order to determine radon levels at a specific location. However, the map does give a valuable indication of the propensity of radon gas accumulation in structures.

Radon sampling was not conducted as part of this assessment. Review of the US EPA Map of Radon Zones places the subject property in Zone 2. Based upon the radon zone classification, radon is not considered to be a significant environmental concern.

6.3.4 Lead in Drinking Water

No public or private potable water system is operated on the subject property.

6.3.5 Mold

Molds are microscopic organisms found virtually everywhere, indoors and outdoors. Mold will grow and multiply under the right conditions, needing only sufficient moisture (e.g.in the form of very high humidity, condensation, or water from a leaking pipe, etc.) and organic material (e.g., ceiling tile, drywall, paper, or natural fiber carpet padding).

Since no structures are developed on the subject property, the evaluation for significant evidence of mold growth was not within the scope of work for this assessment.

6.4 Adjacent Property Reconnaissance

The adjacent property reconnaissance consisted of observing the adjacent properties from the subject property premises. No items of environmental concern were identified on the adjacent properties during the site assessment, including hazardous substances, petroleum products, ASTs, USTs, evidence of releases, PCBs, strong or noxious odors, pools of liquids, sumps or clarifiers, pits or lagoons, stressed vegetation, or any other potential environmental hazards.

7.0 FINDINGS AND CONCLUSIONS

Findings

A *REC* refers to the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: due to release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment.

- Partner did not identify any recognized environmental conditions during the course of this assessment.

A *CREC* refers to a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.

- Partner did not identify any controlled recognized environmental conditions during the course of this assessment.

A *HREC* refers to a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls.

- Partner did not identify any historical recognized environmental conditions during the course of this assessment.

An *environmental issue* refers to environmental concerns identified by Partner, which do not qualify as RECs; however, warrant further discussion.

- Partner did not identify any environmental issues during the course of this assessment.

Conclusions, Opinions and Recommendations

Partner has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527-13 of 860 Sopp Road in Mojave, Kern County, California (the "subject property"). Any exceptions to, or deletions from, this practice are described in Section 1.5 of this report.

This assessment has revealed no evidence of recognized environmental conditions or environmental issues in connection with the subject property. Based on the conclusions of this assessment, Partner recommends no further investigation of the subject property at this time.

8.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

Partner has performed a Phase I Environmental Site Assessment of the property located at 860 Sopp Road in Mojave, Kern County, California in conformance with the scope and limitations of the protocol and the limitations stated earlier in this report. Exceptions to or deletions from this protocol are discussed earlier in this report.

By signing below, Partner declares that, to the best of our professional knowledge and belief, we meet the definition of *Environmental Professional* as defined in §312.10 of 40 CFR §312. Partner has the specific qualifications based on education, training, and experience to assess a *property* of the nature, history, and setting of the subject *property*. Partner has developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Prepared By:

Nathaniel Grondin
Environmental Scientist

Reviewed By:

Jared Eudell
Senior Author

9.0 REFERENCES

Reference Documents

American Society for Testing and Materials, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, ASTM Designation: E1527-13.

Environmental Data Resources (EDR), Radius Report, November 2020

Federal Emergency Management Agency, Federal Insurance Administration, National Flood Insurance Program, Flood Insurance Map, accessed via internet, November 2020

United States Department of Agriculture, Natural Resources Conservation Service, accessed via internet, November 2020

United States Department of Agriculture, Natural Resources Conservation Service, Web Soil Survey, accessed via the internet, November 2020

United States Environmental Protection Agency, EPA Map of Radon Zones (Document EPA-402-R-93-071), accessed via the internet, November 2020

United States Geological Survey, accessed via the Internet, November 2020

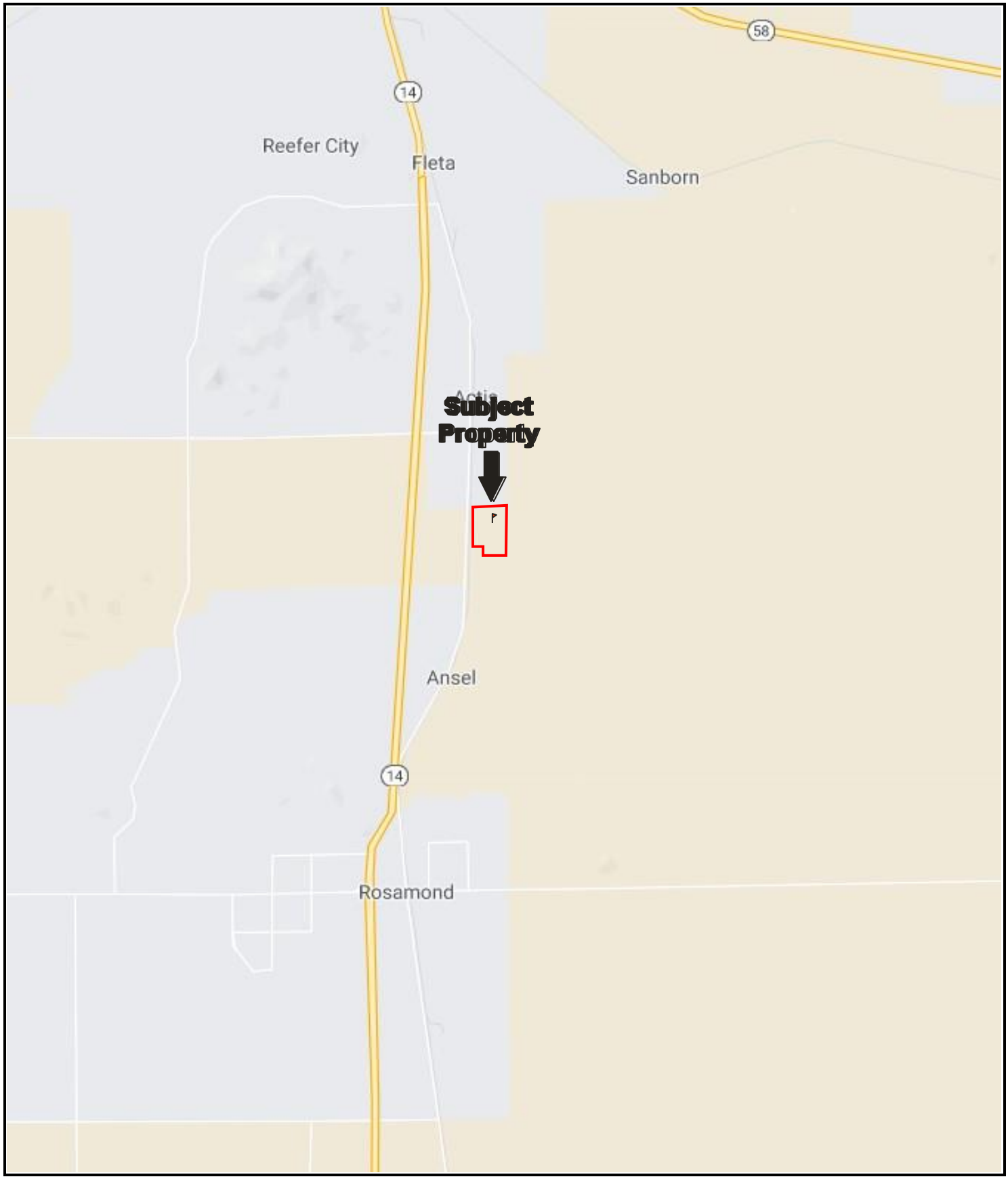
United States Geological Survey Topographic Map, 7.5 minute series, accessed via internet, November 2020

FIGURES

1 SITE LOCATION MAP

2 SITE PLAN

3 TOPOGRAPHIC MAP



N

Drawing Not To Scale

KEY:
Subject Property

FIGURE 1: SITE LOCATION MAP
Project No. 20-299997.1

PARTNER

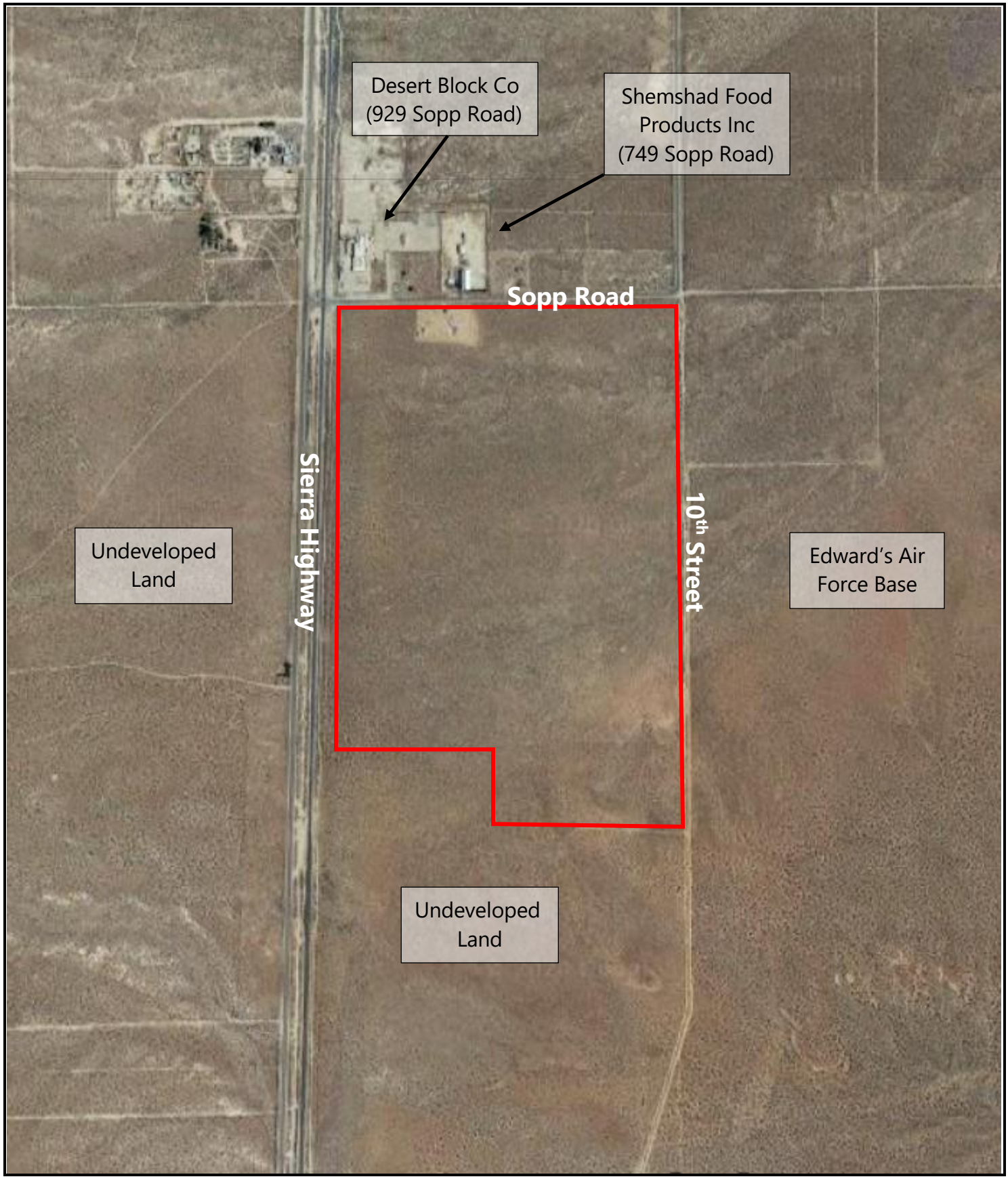
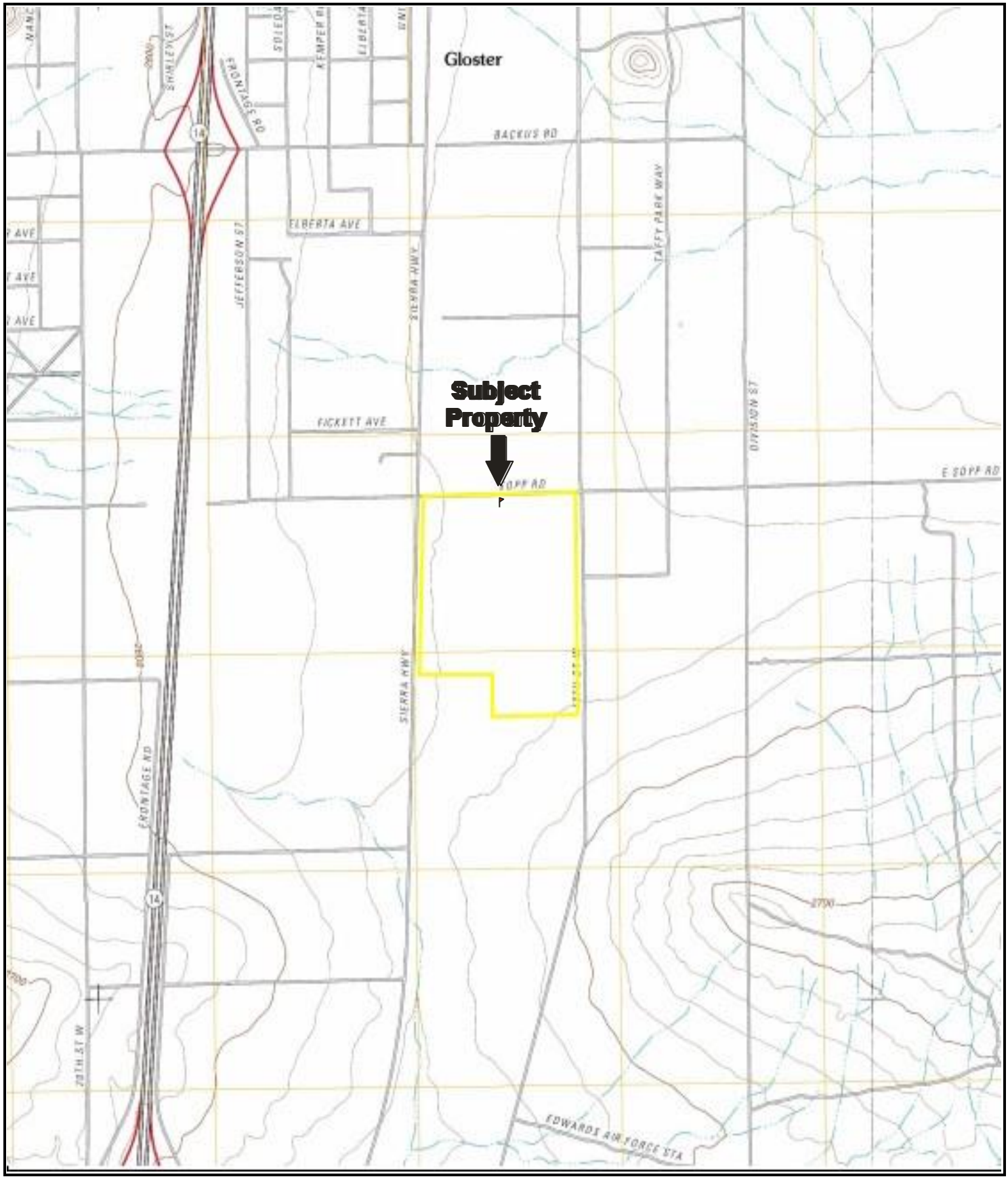


FIGURE 2: SITE PLAN
Project No. 20-299997.1

PARTNER



N

USGS 7.5 Minute *Soledad Mountain, California* Quadrangle
Created: 2012

KEY:
Subject Property

FIGURE 3: TOPOGRAPHIC MAP
Project No. 20-299997.1

PARTNER

APPENDIX A: SITE PHOTOGRAPHS



1. View of the subject property from Sopp Road



2. Storage area on the northern portion of the subject property



3. Plant nursery on the northern portion of the subject property



4. Auto parts storage on the northern portion of the subject property



5. Empty water ASTs



6. 55-gallon drum without secondary containment



7. Undeveloped portion of the subject property from 10th Street West looking northwest



8. Undeveloped portion of the subject property view to the southwest



9. Illegally dumped roofing materials



10. Illegally dumped asphalt shingles



11. View from the southeastern property boundary



12. View of the eastern property boundary



13. Storage containers on the northern portion of the subject property



14. Irrigation well on the northern portion of the subject property



15. Adjacent property to the north of the subject property



16. Adjacent property to the east of the subject property

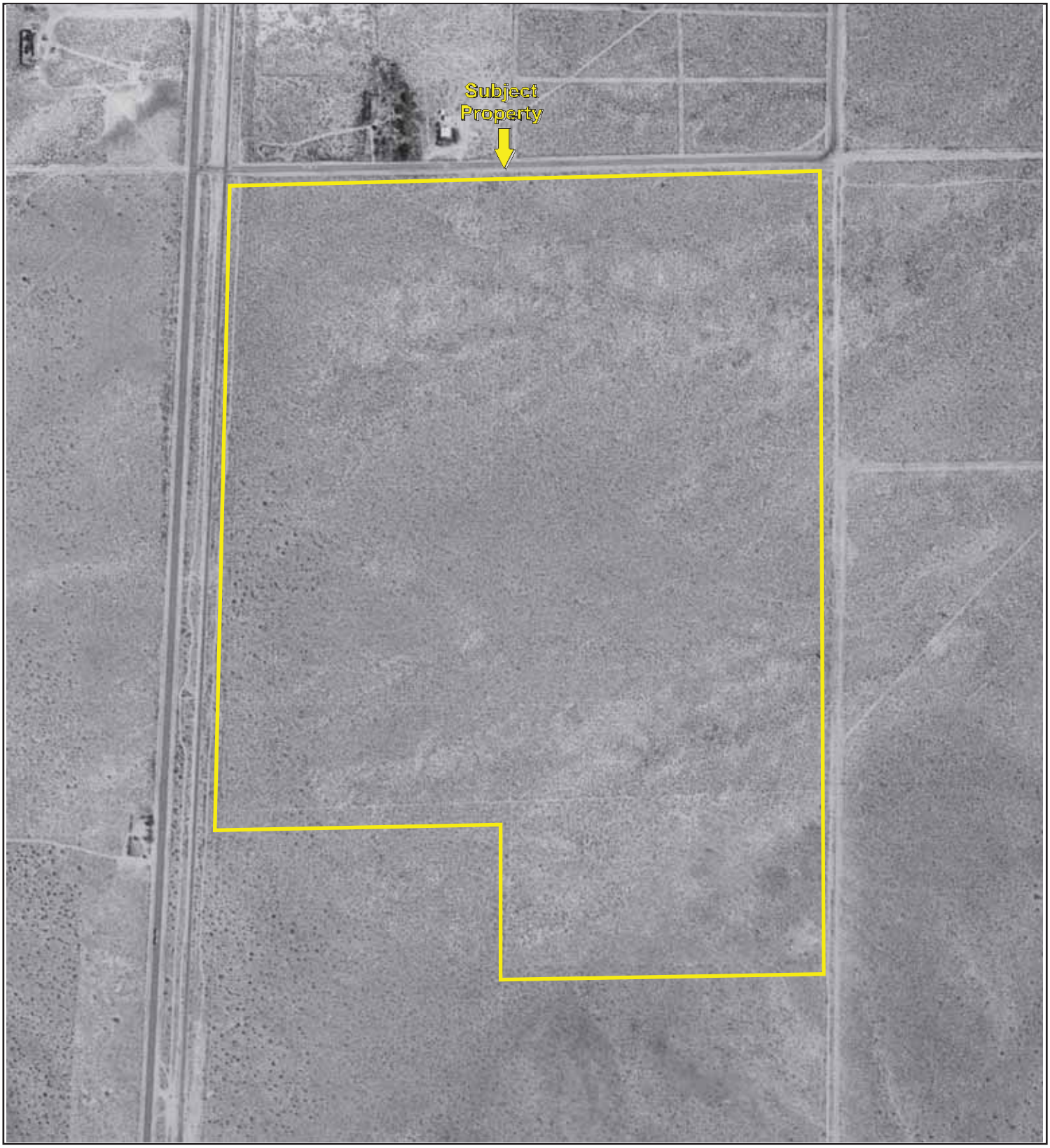


17. Adjacent property to the south of the subject property



18. Adjacent property to the west of the subject property

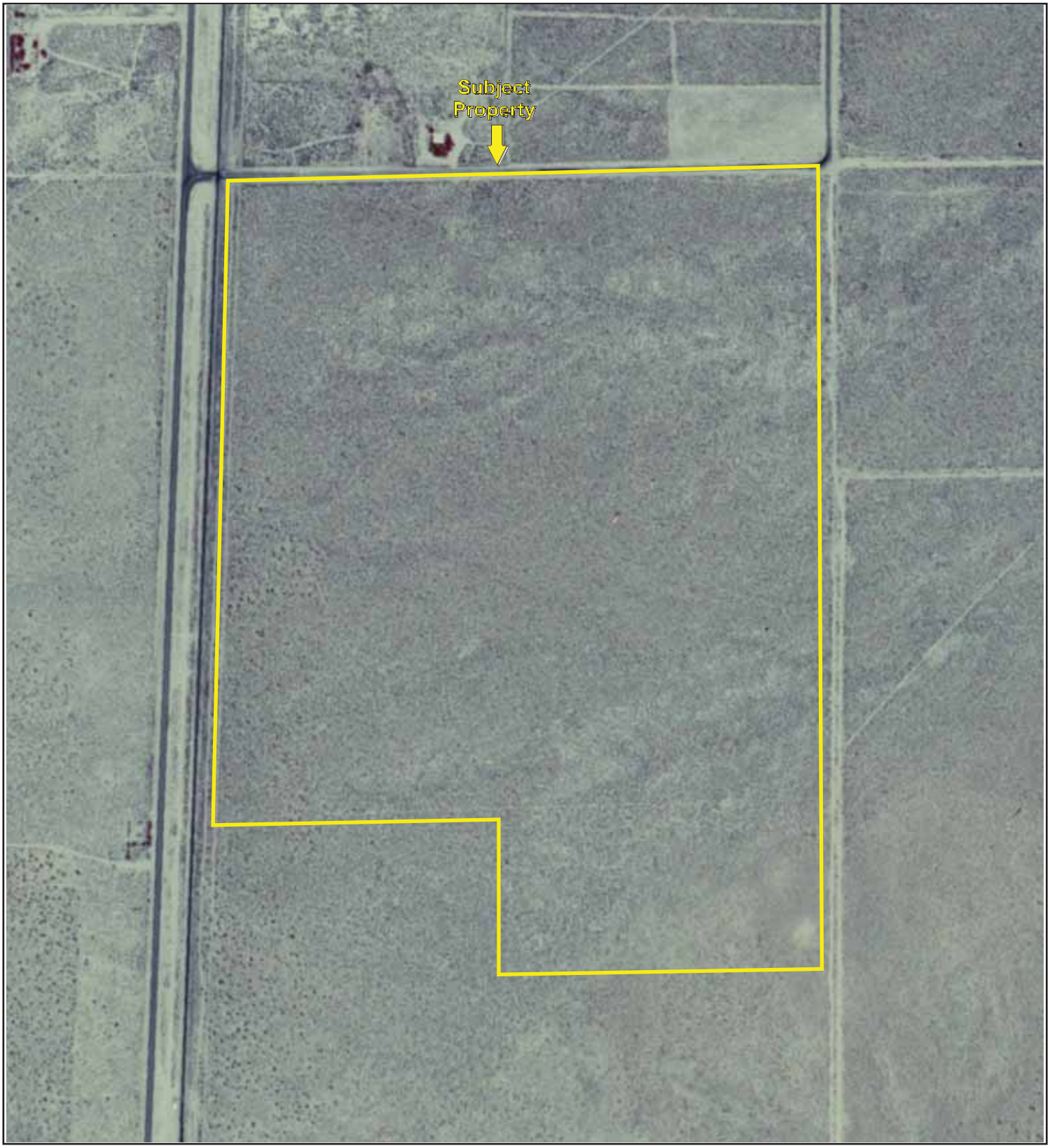
APPENDIX B: HISTORICAL/REGULATORY DOCUMENTATION



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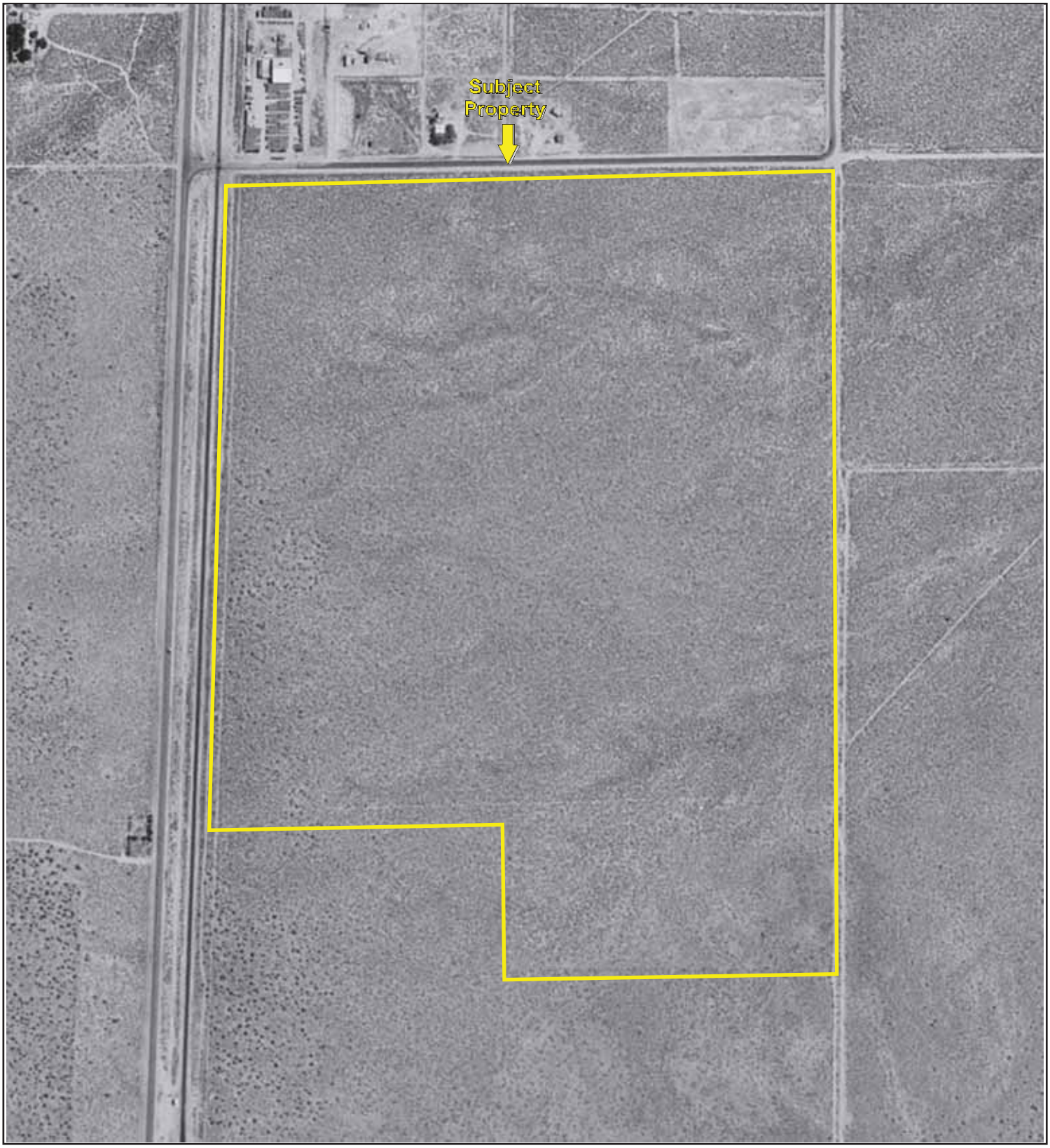
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Key: Subject Property



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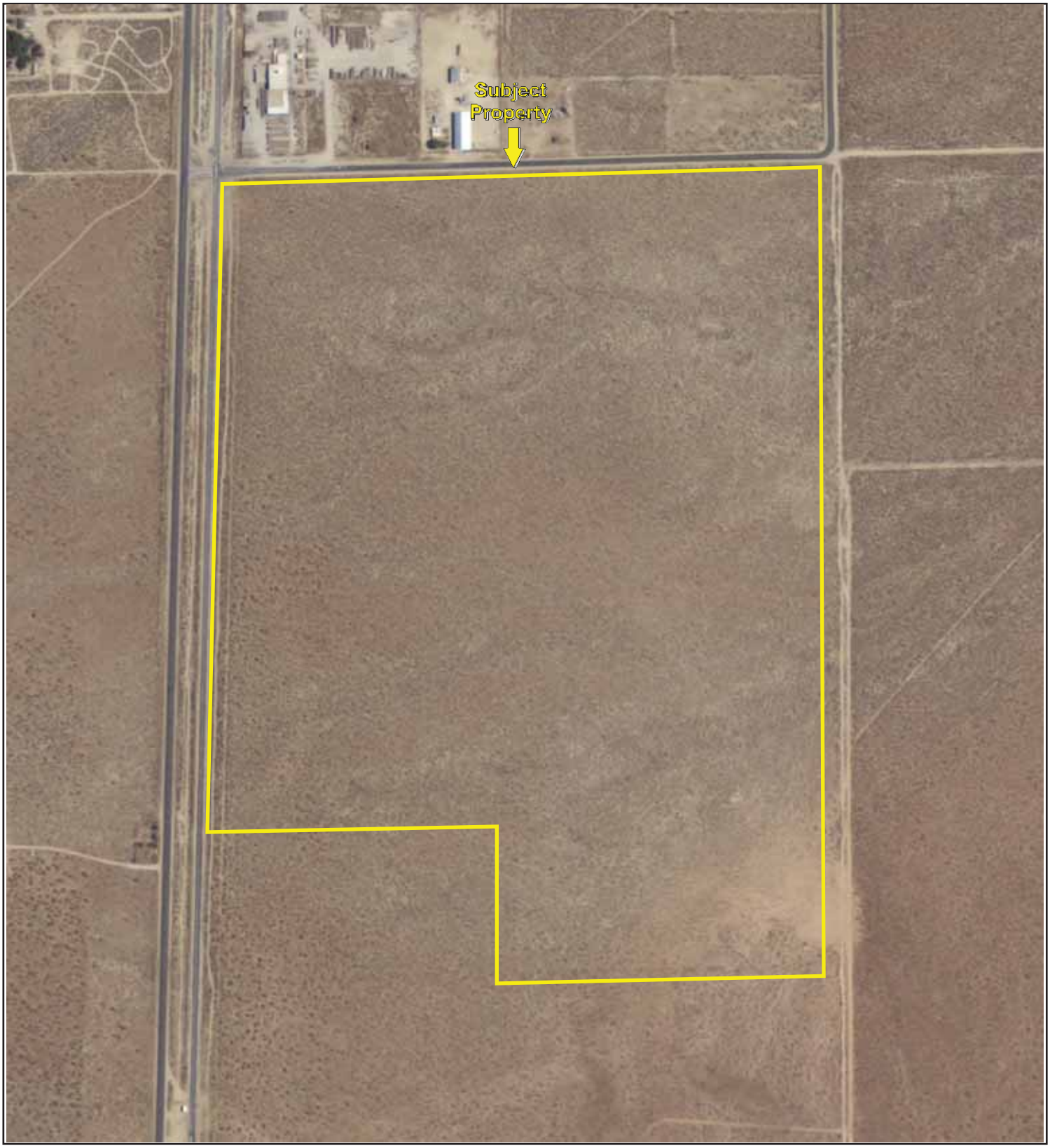
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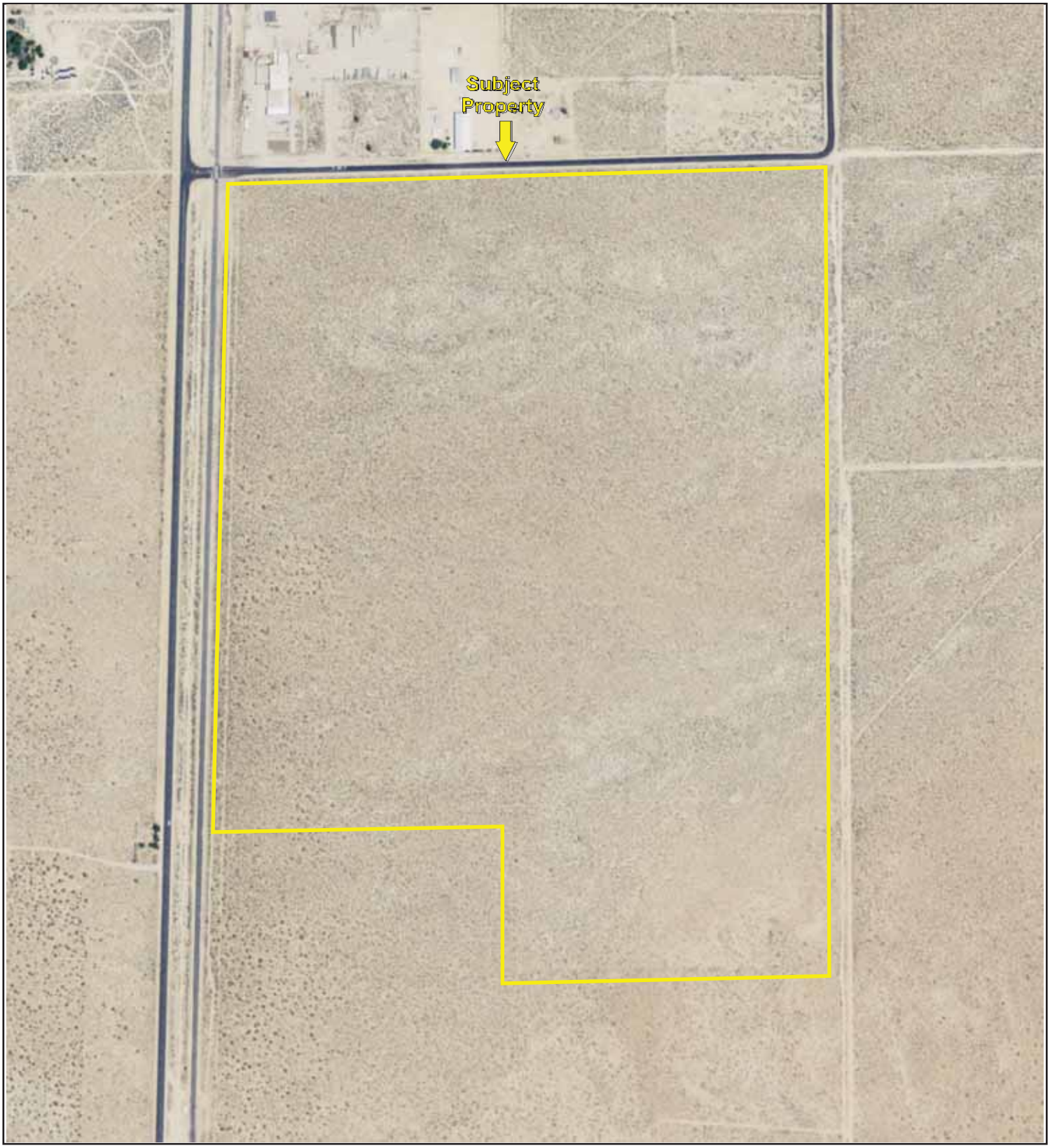
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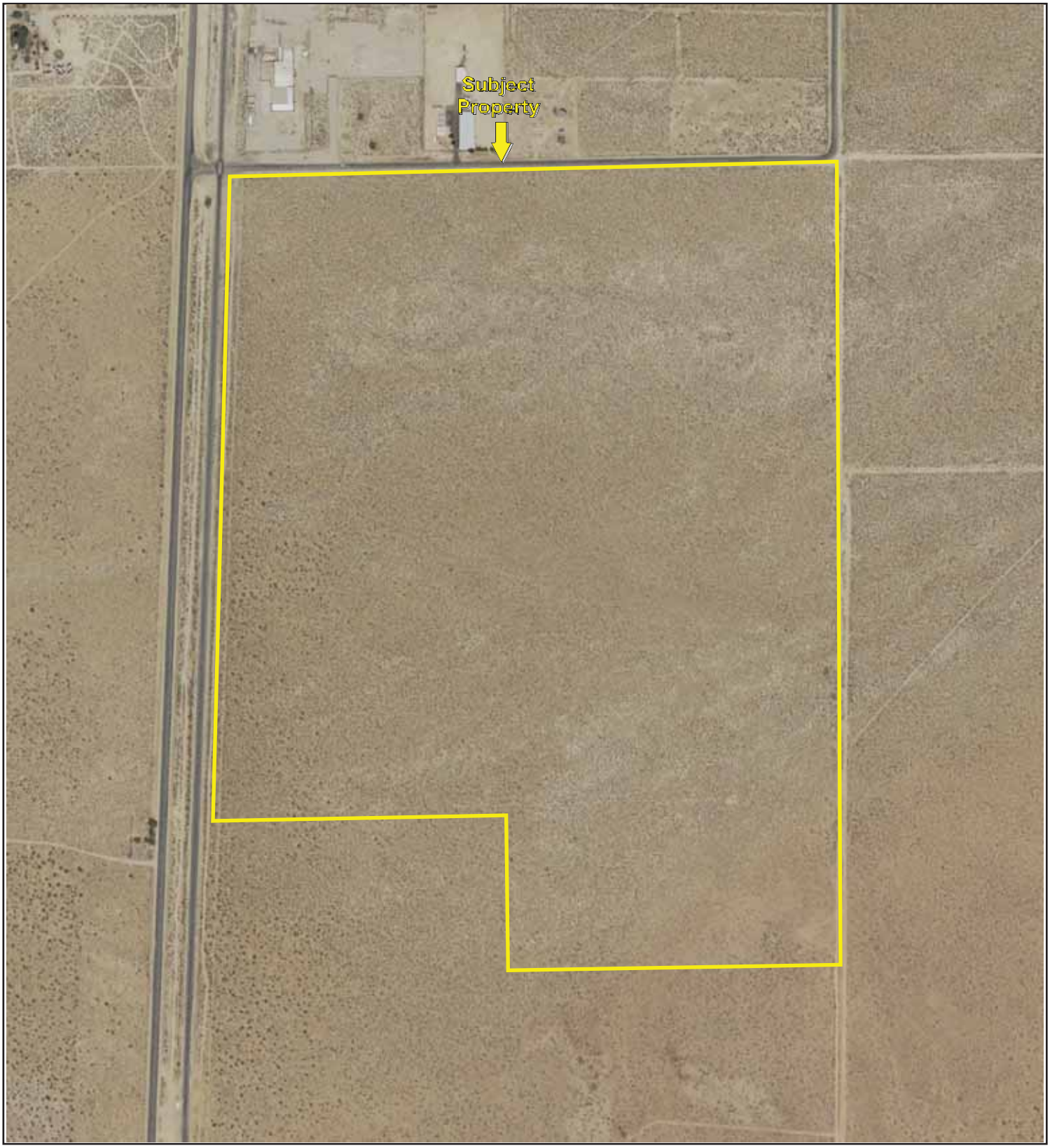
Key: Subject Property



500 1000 2000

N

Key: Subject Property



500 1000 2000

N

Key: Subject Property

Certified Sanborn® Map Report

11/16/20

Site Name:

860 Sopp Rd.
860 Sopp Rd.
Rosamond, CA 93560
EDR Inquiry # 6267145.3

Client Name:

Partner Engineering and Science, Inc.
2154 Torrance Blvd, Suite 200
Torrance, CA 90501-0000
Contact: Alex Flores

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The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # AE98-43AB-856C

PO # 20-299997.1

Project 20-299997.1

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results

Certification #: AE98-43AB-856C

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- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

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860 Sopp Rd.
860 Sopp Rd.
Rosamond, CA 93560

Inquiry Number: 6267145.5
November 23, 2020

The EDR-City Directory Image Report

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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SECTION

Executive Summary

Findings

City Directory Images

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Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

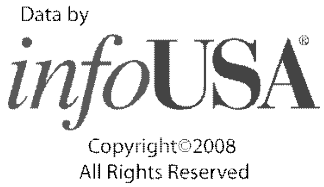
DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	Target Street	Cross Street	Source
2017	☑	☐	EDR Digital Archive
2014	☑	☐	EDR Digital Archive
2010	☑	☐	EDR Digital Archive
2005	☑	☐	EDR Digital Archive
2000	☐	☐	EDR Digital Archive
1995	☑	☐	EDR Digital Archive
1992	☑	☐	EDR Digital Archive
1985	☐	☐	Haines Criss-Cross Directory
1980	☐	☐	Haines Criss-Cross Directory
1975	☐	☐	Haines Criss-Cross Directory

FINDINGS

TARGET PROPERTY STREET

860 Sopp Rd.
Rosamond, CA 93560

Year	*CD Image*	*Source*	
SOPP RD			
2017	pg A1	EDR Digital Archive	
2014	pg A2	EDR Digital Archive	
2010	pg A3	EDR Digital Archive	
2005	pg A4	EDR Digital Archive	
2000	-	EDR Digital Archive	Target and Adjoining not listed in Source
1995	pg A5	EDR Digital Archive	
1992	pg A6	EDR Digital Archive	
1985	-	Haines Criss-Cross Directory	Target and Adjoining not listed in Source
1980	-	Haines Criss-Cross Directory	Target and Adjoining not listed in Source
1975	-	Haines Criss-Cross Directory	Target and Adjoining not listed in Source

FINDINGS

CROSS STREETS

No Cross Streets Identified

City Directory Images

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

SOPP RD 2017

749	BARAJAS, ANGELA
929	DESERT BLOCK
2071	MORRIS, JESS
4034	FREEMAN, TIFFANY A
4120	DEMPSEY, DANIEL

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

SOPP RD 2014

749	BARAJAS, ANGELA
929	DESERT BLOCK
	OCCUPANT UNKNOWN,
2071	MORRIS, JESS
4034	OCCUPANT UNKNOWN,
4120	DEMPSEY, DANIEL
4164	BOZARTH, JEFFREY D

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

SOPP RD 2010

749 AUTO VISION TECHNOLOGIES INC
BARAJAS, ANGELA
929 DESERT BLOCK CO INC
RUBIN, MITCHELL A
2071 MORRIS, JESS
4034 FREEMAN, LYMAN M
4164 SMITH, HOWARD R

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

SOPP RD 2005

749 ALLSTAR CHEMICALS
OCCUPANT UNKNOWN,
929 DESERT BLOCK CO INC
RUBIN, MITCHELL A
4034 CUSHMAN, MICHAEL J
4120 BRATT, ALAN W

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

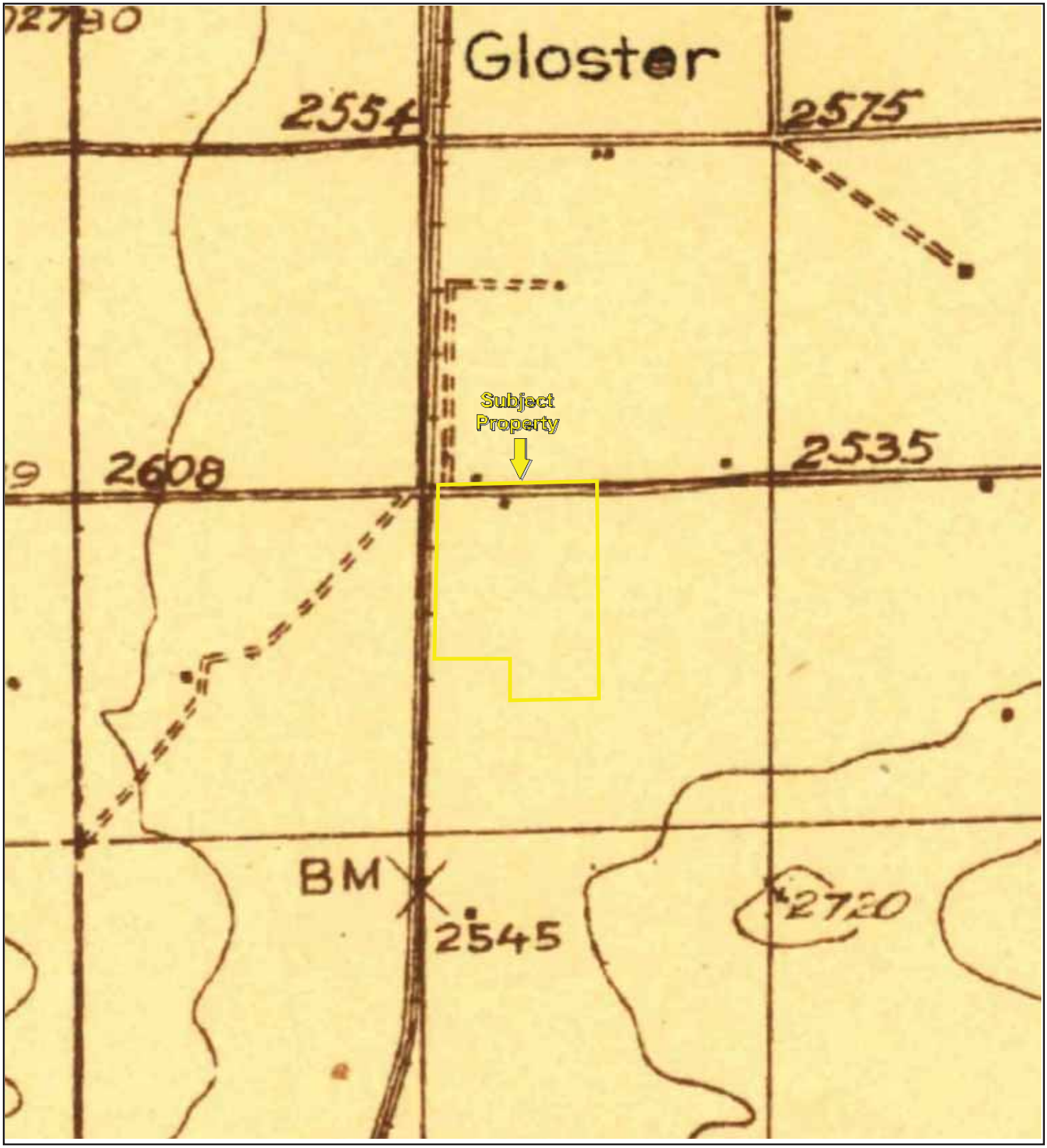
SOPP RD 1995

929 DESERT BLOCK CO

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

SOPP RD 1992

749 YUHASZ, FRANK
929 SHELDON BLCK&CNCRTE
935 GOLDEN EMP CONCRETE

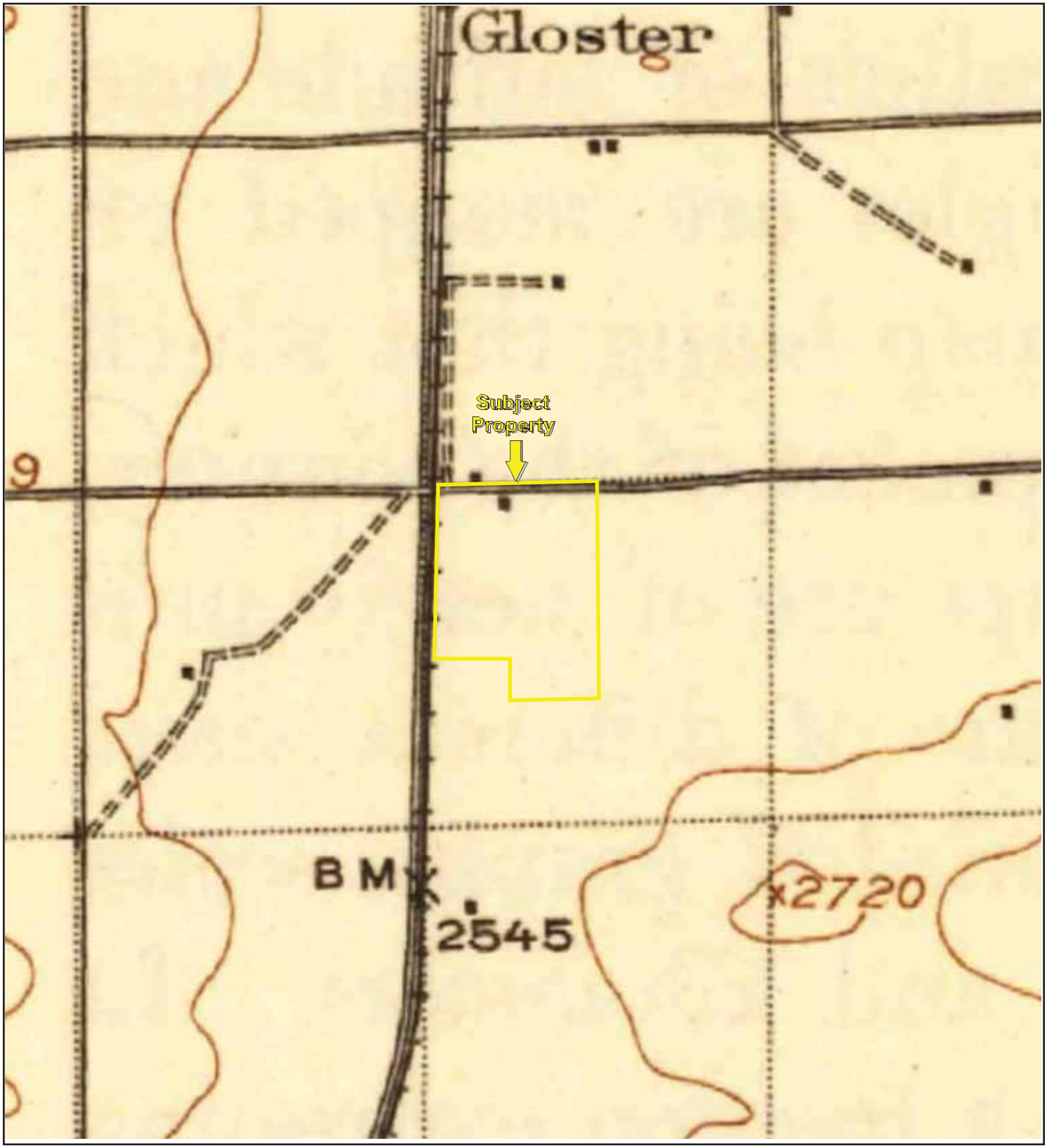


TP, Elizabeth Lake, 1915, 30-minute

0 Miles 0.25 0.5 1 1.5

N

Key: Subject Property

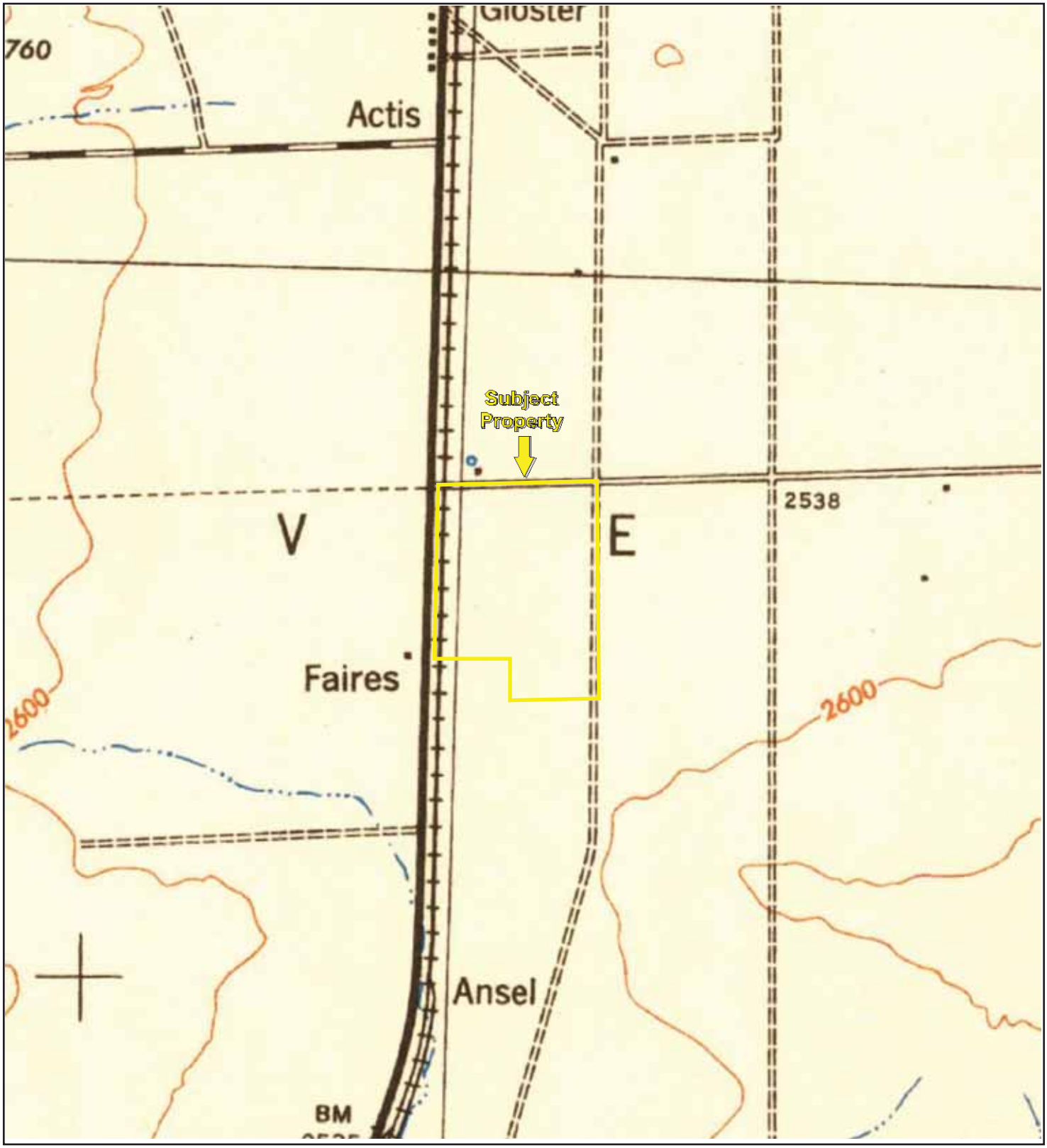


TP, Elizabeth Lake, 1917, 30-minute

0 Miles 0.25 0.5 1 1.5

N

Key: Subject Property

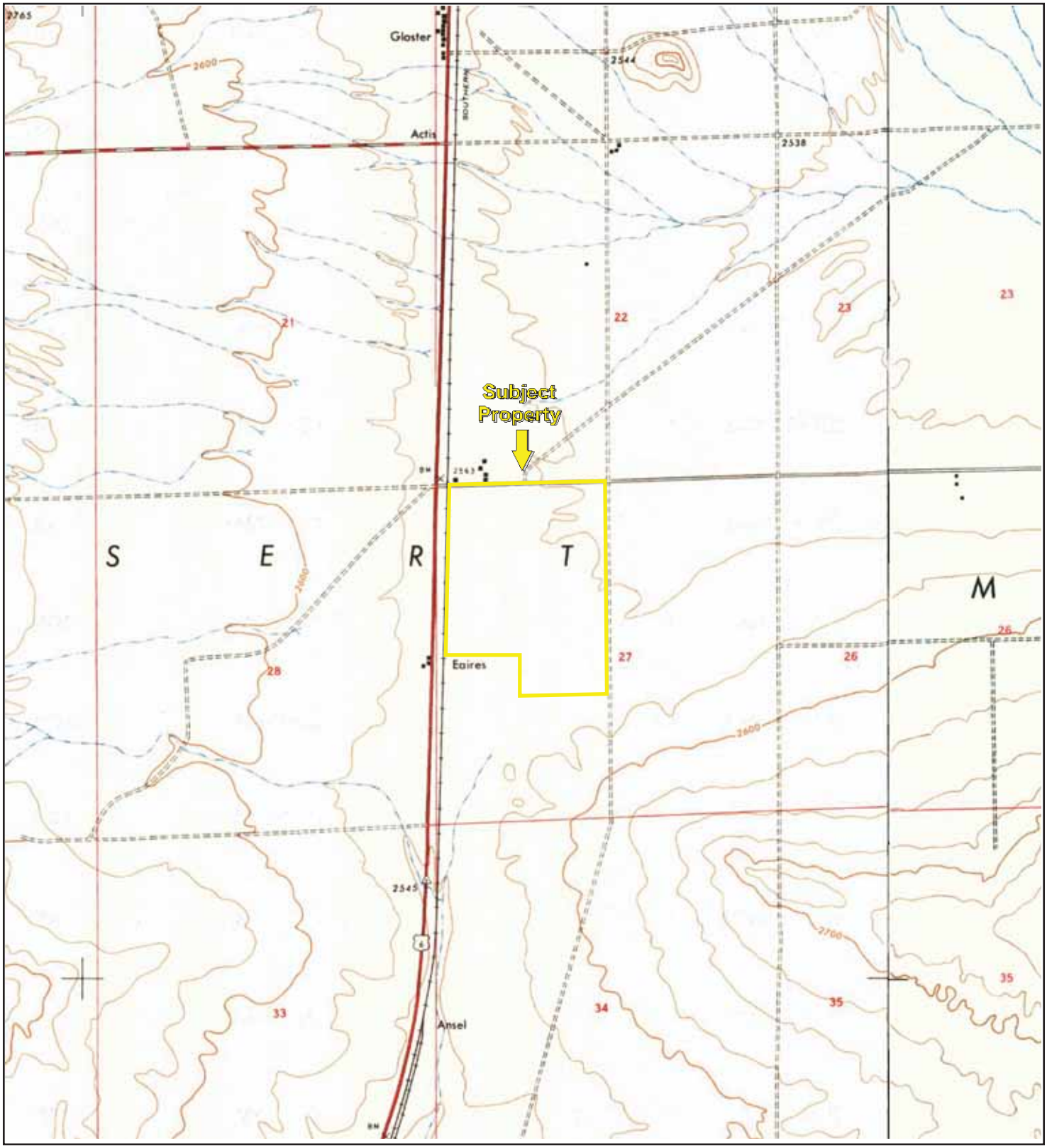


TP, Rosamond, 1943, 15-minute

0 Miles 0.25 0.5 1 1.5

N

Key: Subject Property



TP, Soledad Mountain, 1947, 7.5-minute
E, Bissell, 1947, 7.5-minute

0 Miles 0.25 0.5 1 1.5

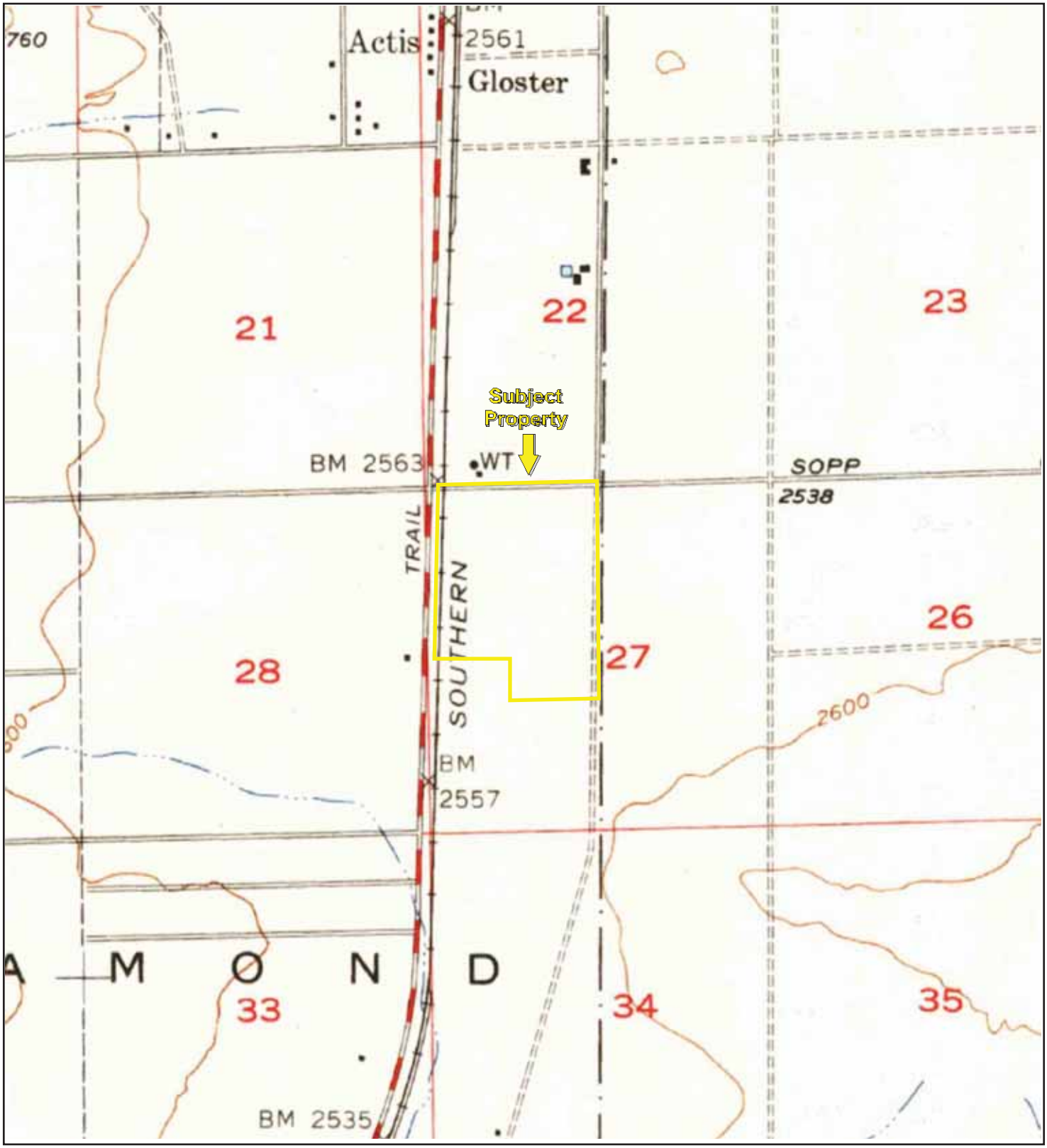
N

Key: Subject Property

APPENDIX B: Topographic Maps

Project No. 20-299997.1

PARTNER

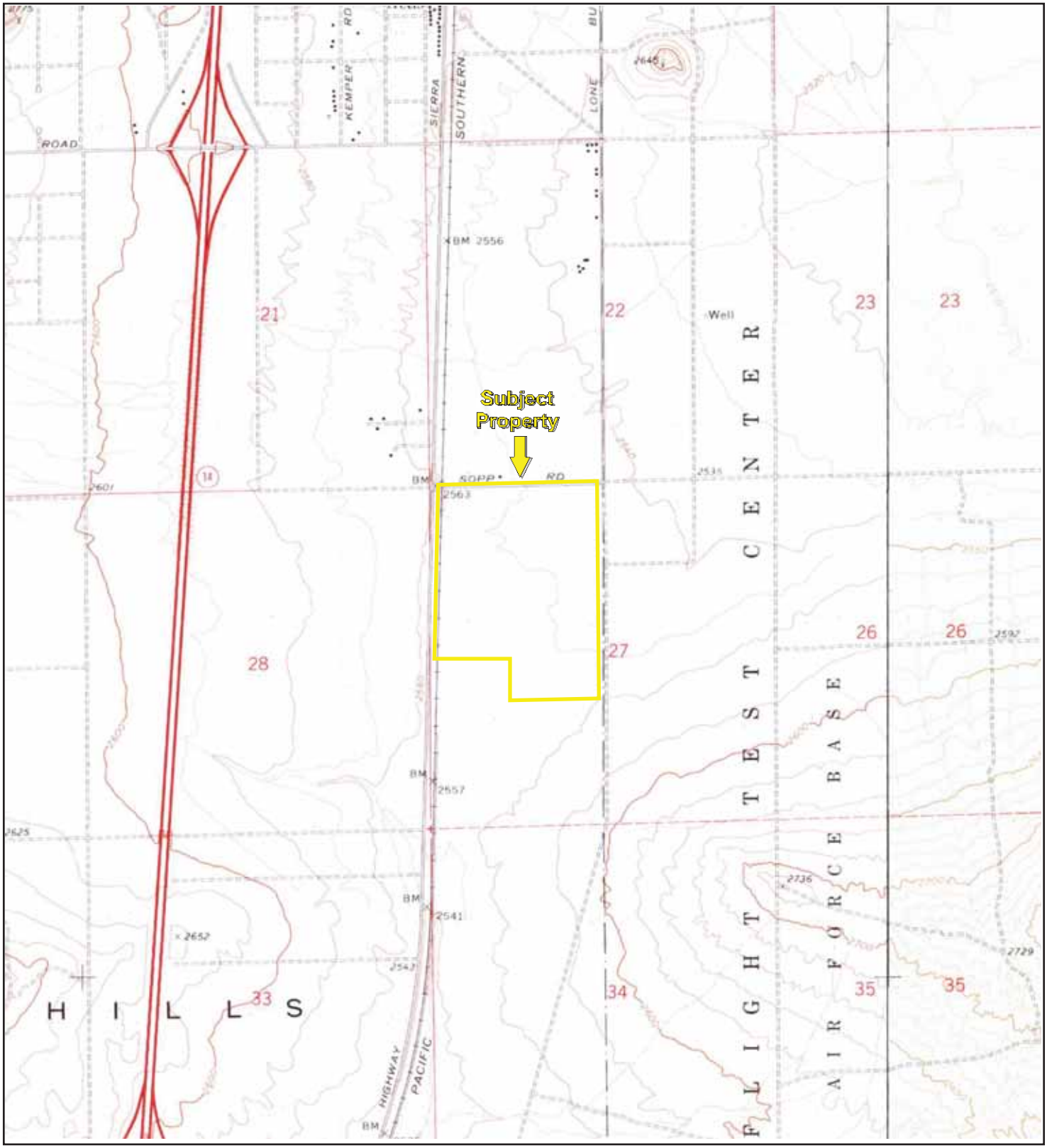


TP, Rosamond, 1956, 15-minute

0 Miles 0.25 0.5 1 1.5

N

Key: Subject Property



TP, Soledad Mtn, 1973, 7.5-minute
E, Bissell, 1973, 7.5-minute

0 Miles 0.25 0.5 1 1.5

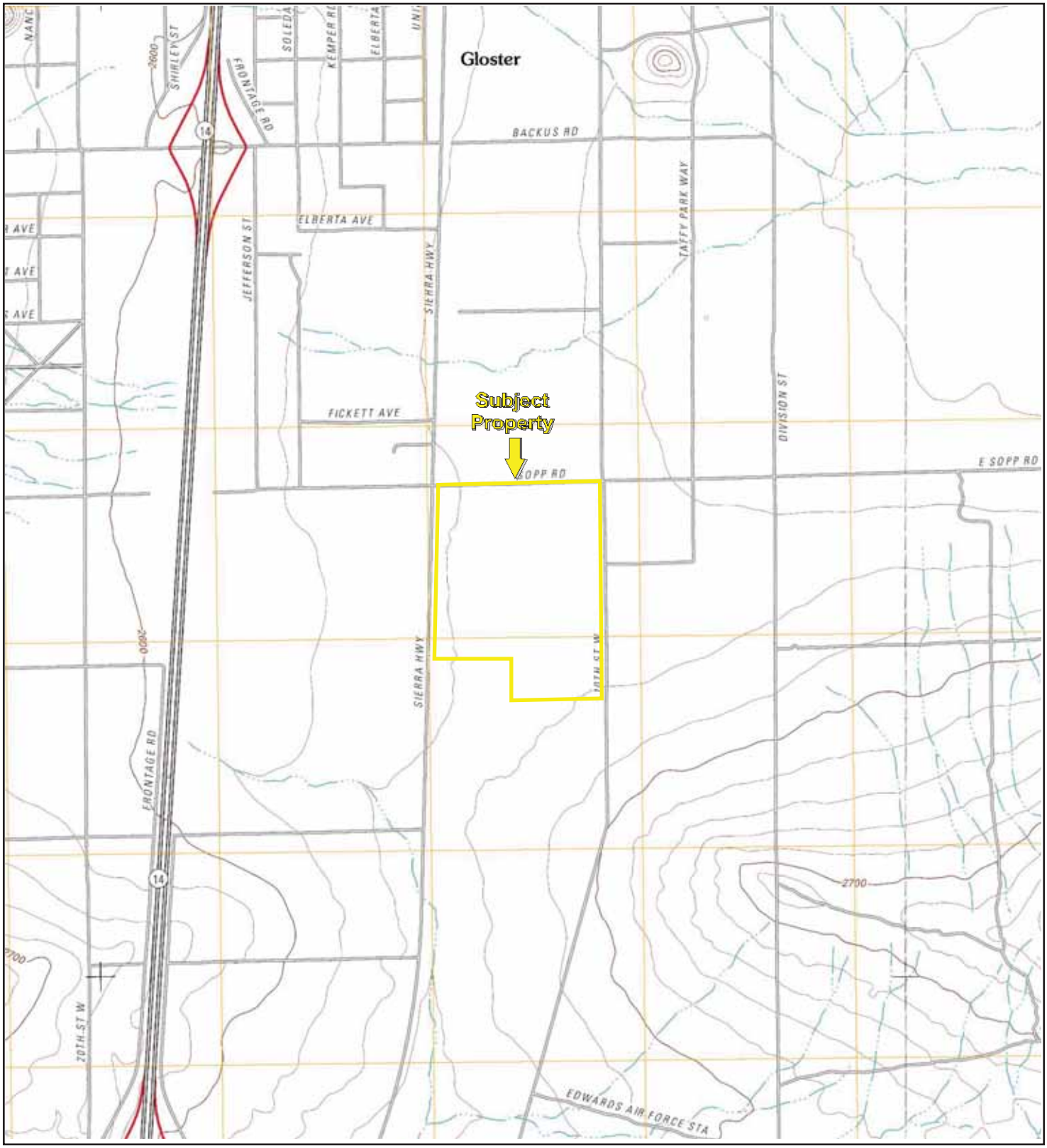
N

Key: Subject Property

APPENDIX B: Topographic Maps

Project No. 20-299997.1

PARTNER



TP, Soledad Mountain, 2012, 7.5-minute
E, Bissell, 2012, 7.5-minute

0 Miles 0.25 0.5 1 1.5

N

Key: Subject Property

APPENDIX B: Topographic Maps

Project No. 20-299997.1

PARTNER

APPENDIX C: REGULATORY DATABASE REPORT

PARTNER

860 Sopp Rd.
860 Sopp Rd.
Rosamond, CA 93560

Inquiry Number: 6267145.2s
November 16, 2020

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

860 SOPP RD.
ROSAMOND, CA 93560

COORDINATES

Latitude (North):	34.9338300 - 34° 56' 1.78''
Longitude (West):	118.1447660 - 118° 8' 41.15''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	395449.3
UTM Y (Meters):	3866105.8
Elevation:	2559 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5630773 SOLEDAD MOUNTAIN, CA
Version Date:	2012
East Map:	5630785 BISSELL, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140921, 20140823
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
860 SOPP RD.
ROSAMOND, CA 93560

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
Reg	EDWARDS AIR FORCE BA		DOD	Same	1 ft.
Reg	EDWARDS AIR FORCE BA	5 EAST POPSON AVE BL	NPL, SEMS, CORRACTS, RCRA-TSDF, RCRA-LQG, US ENG..	Same	96, 0.018, East
1	DUNGAN TRUCKING	749 SOPP RD	CUPA Listings, HWTS	Lower	104, 0.020, NNW
2	ACCOUNT AUTO	8201 SIERRA HWY	RCRA-SQG, FINDS, ECHO, HAZNET, HWTS	Higher	1310, 0.248, NW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ---------- Federal Facility Site Information listing

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

Federal RCRA generators list

RCRA-VSQG ---------- RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System

Federal ERNS list

ERNS ---------- Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE ---------- State Response Sites

State and tribal landfill and/or solid waste disposal site lists

SWF/LF ---------- Solid Waste Information System

EXECUTIVE SUMMARY

State and tribal leaking storage tank lists

LUST ---- Geotracker's Leaking Underground Fuel Tank Report
INDIAN LUST ---- Leaking Underground Storage Tanks on Indian Land
CPS-SLIC ---- Statewide SLIC Cases

State and tribal registered storage tank lists

FEMA UST ---- Underground Storage Tank Listing
UST ---- Active UST Facilities
AST ---- Aboveground Petroleum Storage Tank Facilities
INDIAN UST ---- Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

VCP ---- Voluntary Cleanup Program Properties
INDIAN VCP ---- Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS ---- Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ---- A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT ---- Waste Management Unit Database
SWRCY ---- Recycler Database
HAULERS ---- Registered Waste Tire Haulers Listing
INDIAN ODI ---- Report on the Status of Open Dumps on Indian Lands
ODI ---- Open Dump Inventory
DEBRIS REGION 9 ---- Torres Martinez Reservation Illegal Dump Site Locations
IHS OPEN DUMPS ---- Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ---- Delisted National Clandestine Laboratory Register
SCH ---- School Property Evaluation Program
CDL ---- Clandestine Drug Labs
CERS HAZ WASTE ---- CERS HAZ WASTE
Toxic Pits ---- Toxic Pits Cleanup Act Sites
US CDL ---- National Clandestine Laboratory Register

Local Lists of Registered Storage Tanks

SWEEPS UST ---- SWEEPS UST Listing
HIST UST ---- Hazardous Substance Storage Container Database
CERS TANKS ---- California Environmental Reporting System (CERS) Tanks
CA FID UST ---- Facility Inventory Database

EXECUTIVE SUMMARY

Local Land Records

LIENS	Environmental Liens Listing
LIENS 2	CERCLA Lien Information

Records of Emergency Release Reports

HMIRS	Hazardous Materials Information Reporting System
CHMIRS	California Hazardous Material Incident Report System
LDS	Land Disposal Sites Listing
MCS	Military Cleanup Sites Listing
SPILLS 90	SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated
FUDS	Formerly Used Defense Sites
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR	Financial Assurance Information
EPA WATCH LIST	EPA WATCH LIST
2020 COR ACTION	2020 Corrective Action Program List
TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
ICIS	Integrated Compliance Information System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
CONSENT	Superfund (CERCLA) Consent Decrees
INDIAN RESERV	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem
US MINES	Mines Master Index File
ABANDONED MINES	Abandoned Mines
FINDS	Facility Index System/Facility Registry System
UXO	Unexploded Ordnance Sites
DOCKET HWC	Hazardous Waste Compliance Docket Listing
ECHO	Enforcement & Compliance History Information
FUELS PROGRAM	EPA Fuels Program Registered Listing
CA BOND EXP. PLAN	Bond Expenditure Plan
Cortese	"Cortese" Hazardous Waste & Substances Sites List
DRYCLEANERS	Cleaner Facilities

EMI	Emissions Inventory Data
ENF	Enforcement Action Listing
Financial Assurance	Financial Assurance Information Listing
HAZNET	Facility and Manifest Data
ICE	ICE
HIST CORTESE	Hazardous Waste & Substance Site List
HWP	EnviroStor Permitted Facilities Listing
HWT	Registered Hazardous Waste Transporter Database
MINES	Mines Site Location Listing
MWMP	Medical Waste Management Program Listing
NPDES	NPDES Permits Listing
PEST LIC	Pesticide Regulation Licenses Listing
PROC	Certified Processors Database
Notify 65	Proposition 65 Records
UIC	UIC Listing
UIC GEO	UIC GEO (GEOTRACKER)
WASTEWATER PITS	Oil Wastewater Pits Listing
WDS	Waste Discharge System
WIP	Well Investigation Program Case List
MILITARY PRIV SITES	MILITARY PRIV SITES (GEOTRACKER)
PROJECT	PROJECT (GEOTRACKER)
WDR	Waste Discharge Requirements Listing
CIWQS	California Integrated Water Quality System
CERS	CERS
NON-CASE INFO	NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS	OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS	PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT	SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ	Well Stimulation Project (GEOTRACKER)
HWTS	Hazardous Waste Tracking System
MINES MRDS	Mineral Resources Data System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	EDR Proprietary Manufactured Gas Plants
EDR Hist Auto	EDR Exclusive Historical Auto Stations
EDR Hist Cleaner	EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF	Recovered Government Archive Solid Waste Facilities List
RGA LUST	Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

EXECUTIVE SUMMARY

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: Also known as Superfund, the National Priority List database is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund program. The source of this database is the U.S. EPA.

A review of the NPL list, as provided by EDR, and dated 07/29/2020 has revealed that there is 1 NPL site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EDWARDS AIR FORCE BA Cerclis ID:: 902725 EPA Id: CA1570024504	***5 EAST POPSON AVE BL***	***E 0 - 1/8 (0.018 mi.)***	***0***	***9***

Federal CERCLIS list

SEMS: SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the SEMS list, as provided by EDR, and dated 07/29/2020 has revealed that there is 1 SEMS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EDWARDS AIR FORCE BA Site ID: 0902725 EPA Id: CA1570024504	***5 EAST POPSON AVE BL***	***E 0 - 1/8 (0.018 mi.)***	***0***	***9***

Federal RCRA CORRACTS facilities list

CORRACTS: CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

A review of the CORRACTS list, as provided by EDR, and dated 06/15/2020 has revealed that there is 1 CORRACTS site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EDWARDS AIR FORCE BA EPA ID:: CA1570024504	***5 EAST POPSON AVE BL***	***E 0 - 1/8 (0.018 mi.)***	***0***	***9***

EXECUTIVE SUMMARY

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

A review of the RCRA-TSDF list, as provided by EDR, and dated 06/15/2020 has revealed that there is 1 RCRA-TSDF site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EDWARDS AIR FORCE BA EPA ID:: CA1570024504	***5 EAST POPSON AVE BL***	***E 0 - 1/8 (0.018 mi.)***	***0***	***9***

Federal RCRA generators list

RCRA-LQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

A review of the RCRA-LQG list, as provided by EDR, and dated 06/15/2020 has revealed that there is 1 RCRA-LQG site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EDWARDS AIR FORCE BA EPA ID:: CA1570024504	***5 EAST POPSON AVE BL***	***E 0 - 1/8 (0.018 mi.)***	***0***	***9***

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 06/15/2020 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ACCOUNT AUTO EPA ID:: CAD983582826	***8201 SIERRA HWY***	***NW 1/8 - 1/4 (0.248 mi.)***	***2***	***437***

Federal institutional controls / engineering controls registries

US ENG CONTROLS: A listing of sites with engineering controls in place.

A review of the US ENG CONTROLS list, as provided by EDR, and dated 02/13/2020 has revealed that there is 1 US ENG CONTROLS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EDWARDS AIR FORCE BA EPA ID:: CA1570024504 EPA ID:: CA1570024504	***5 EAST POPSON AVE BL***	***E 0 - 1/8 (0.018 mi.)***	***0***	***9***

US INST CONTROLS: A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

A review of the US INST CONTROLS list, as provided by EDR, and dated 02/13/2020 has revealed that there is 1 US INST CONTROLS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EDWARDS AIR FORCE BA EPA ID:: CA1570024504	***5 EAST POPSON AVE BL***	***E 0 - 1/8 (0.018 mi.)***	***0***	***9***

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 07/27/2020 has revealed that there is 1 ENVIROSTOR site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EDWARDS AIR FORCE BA Facility Id: 15970001 Status: Active	***5 EAST POPSON AVE BL***	***E 0 - 1/8 (0.018 mi.)***	***0***	***9***

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Hazardous waste / Contaminated Sites

HIST Cal-Sites: Formerly known as ASPIS, this database contains both known and potential hazardous substance sites. The source is the California Department of Toxic Substance Control. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

A review of the HIST Cal-Sites list, as provided by EDR, and dated 08/08/2005 has revealed that there is 1 HIST Cal-Sites site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EDWARDS AIR FORCE BA	***5 EAST POPSON AVE BL***	***E 0 - 1/8 (0.018 mi.)***	***0***	***9***

PFAS: A listing of PFAS contaminated sites included in the GeoTracker database.

A review of the PFAS list, as provided by EDR, and dated 06/08/2020 has revealed that there is 1 PFAS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EDWARDS AIR FORCE BA	***5 EAST POPSON AVE BL***	***E 0 - 1/8 (0.018 mi.)***	***0***	***9***

Local Land Records

DEED: The use of recorded land use restrictions is one of the methods the DTSC uses to protect the public from unsafe exposures to hazardous substances and wastes .

A review of the DEED list, as provided by EDR, and dated 06/01/2020 has revealed that there is 1 DEED site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EDWARDS AIR FORCE BA	***5 EAST POPSON AVE BL***	***E 0 - 1/8 (0.018 mi.)***	***0***	***9***
Status: ACTIVE				
Envirostor ID: 15970001				

Other Ascertainable Records

DOD: Consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

A review of the DOD list, as provided by EDR, and dated 12/31/2005 has revealed that there is 1 DOD site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EDWARDS AIR FORCE BA		0 - 1/8 (0.000 mi.)	0	9

EXECUTIVE SUMMARY

ROD: Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid the cleanup.

A review of the ROD list, as provided by EDR, and dated 07/29/2020 has revealed that there is 1 ROD site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EDWARDS AIR FORCE BA	***5 EAST POPSON AVE BL***	***E 0 - 1/8 (0.018 mi.)***	***0***	***9***
EPA ID:: CA1570024504				

CUPA Listings: A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

A review of the CUPA Listings list, as provided by EDR, has revealed that there is 1 CUPA Listings site within approximately 0.25 miles of the target property.

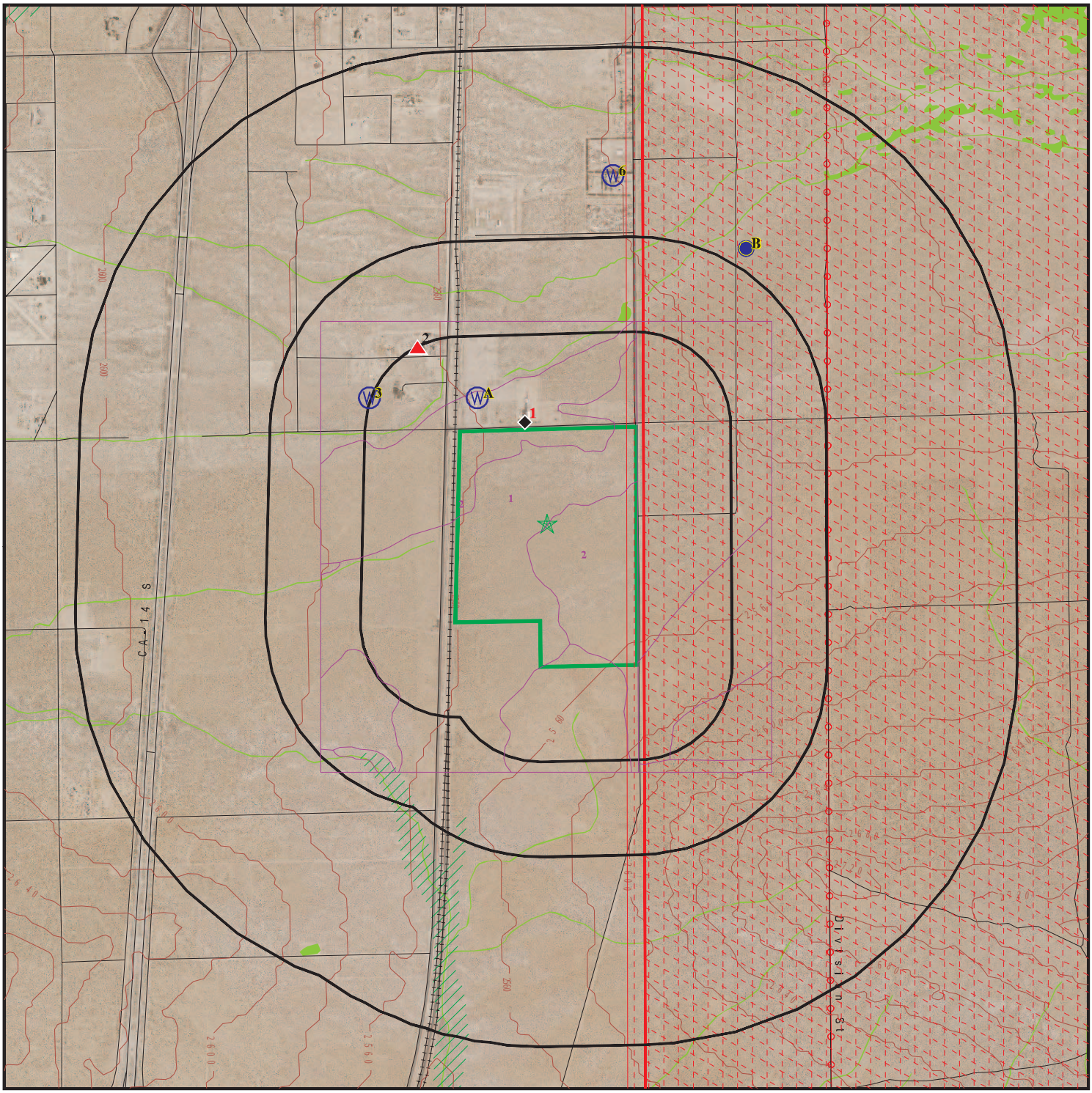
Lower Elevation	Address	Direction / Distance	Map ID	Page
DUNGAN TRUCKING	***749 SOPP RD***	***NNW 0 - 1/8 (0.020 mi.)***	***1***	***436***
Database: KERN CO CUPA, Date of Government Version: 07/28/2020				

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 2 records.

Site Name	Database(s)
AVENUE A	SEMS-ARCHIVE
SWEETSER ROAD UNAUTHORIZED DISPOSA	ENVIROSTOR

OVERVIEW MAP - 6267145.2S



0 1/4 1/2 1 Miles

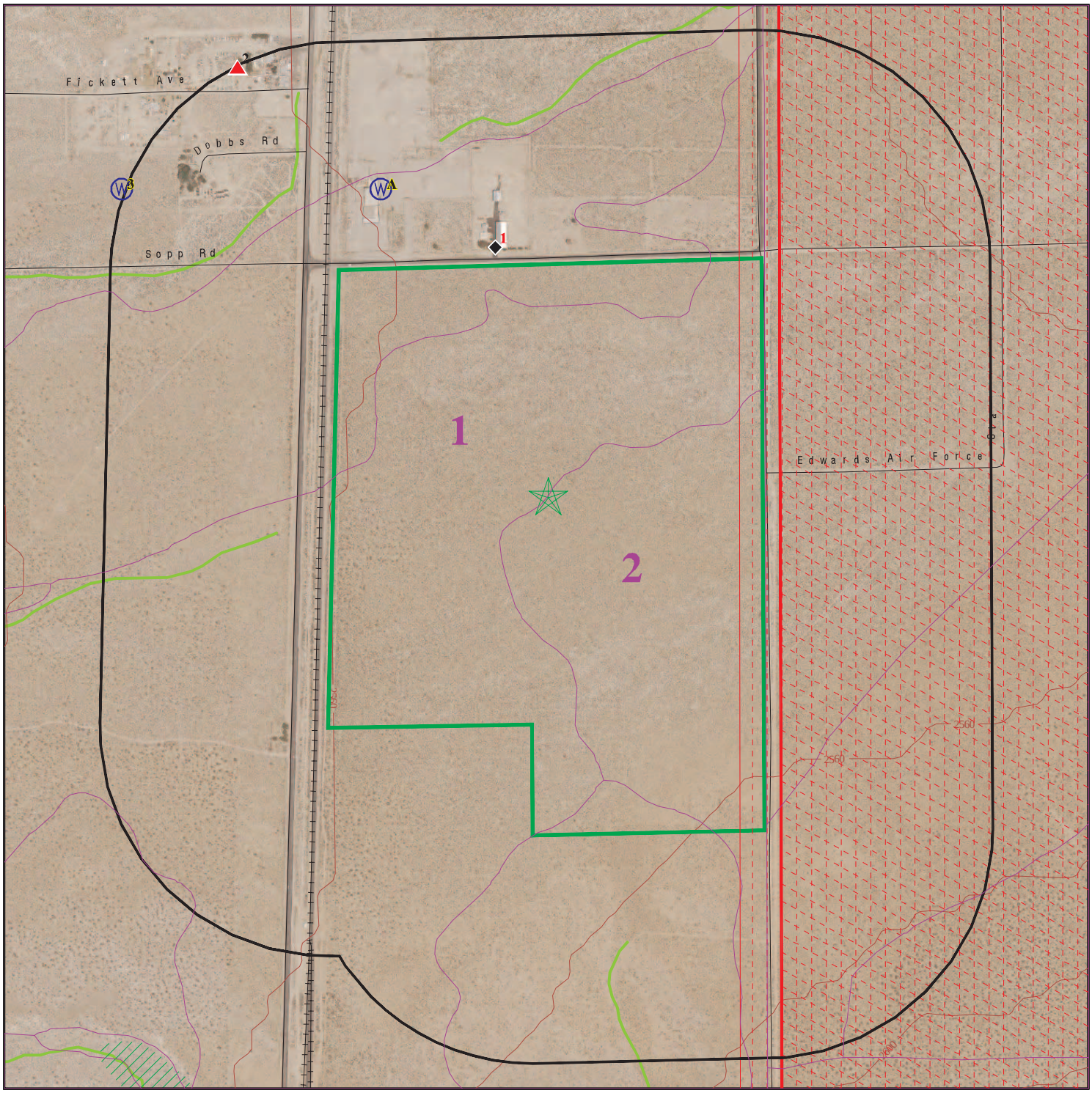
- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: 860 Sopp Rd. ADDRESS: 860 Sopp Rd. Rosamond CA 93560 LAT/LONG: 34.93383 / 118.144766	CLIENT: Partner Engineering and Science, Inc. CONTACT: Alex Flores INQUIRY #: 6267145.2s DATE: November 16, 2020 10:49 am

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DETAIL MAP - 6267145.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites

0 1/8 1/4 1/2 Miles

- Indian Reservations BIA
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: 860 Sopp Rd.	CLIENT: Partner Engineering and Science, Inc.
ADDRESS: 860 Sopp Rd.	CONTACT: Alex Flores
Rosamond CA 93560	INQUIRY #: 6267145.2s
LAT/LONG: 34.93383 / 118.144766	DATE: November 16, 2020 10:53 am

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		1	0	0	0	NR	1
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		1	0	0	NR	NR	1
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		1	0	0	0	NR	1
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		1	0	0	NR	NR	1
Federal RCRA generators list								
RCRA-LQG	0.250		1	0	NR	NR	NR	1
RCRA-SQG	0.250		0	1	NR	NR	NR	1
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		1	0	0	NR	NR	1
US INST CONTROLS	0.500		1	0	0	NR	NR	1
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		1	0	0	0	NR	1
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		1	0	0	0	NR	1
SCH	0.250		0	0	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
CERS HAZ WASTE	0.250		0	0	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
PFAS	0.500		1	0	0	NR	NR	1
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		0	0	NR	NR	NR	0
HIST UST	0.250		0	0	NR	NR	NR	0
CERS TANKS	0.250		0	0	NR	NR	NR	0
CA FID UST	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	TP		NR	NR	NR	NR	NR	0
DEED	0.500		1	0	0	NR	NR	1
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
CHMIRS	TP		NR	NR	NR	NR	NR	0
LDS	TP		NR	NR	NR	NR	NR	0
MCS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		1	0	0	0	NR	1
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		1	0	0	0	NR	1
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		1	0	NR	NR	NR	1

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	TP		NR	NR	NR	NR	NR	0
ENF	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
HAZNET	TP		NR	NR	NR	NR	NR	0
ICE	TP		NR	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	0	0	NR	NR	0
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
PEST LIC	TP		NR	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
UIC GEO	TP		NR	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	TP		NR	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	TP		NR	NR	NR	NR	NR	0
PROJECT	TP		NR	NR	NR	NR	NR	0
WDR	TP		NR	NR	NR	NR	NR	0
CIWQS	TP		NR	NR	NR	NR	NR	0
CERS	TP		NR	NR	NR	NR	NR	0
NON-CASE INFO	TP		NR	NR	NR	NR	NR	0
OTHER OIL GAS	TP		NR	NR	NR	NR	NR	0
PROD WATER PONDS	TP		NR	NR	NR	NR	NR	0
SAMPLING POINT	TP		NR	NR	NR	NR	NR	0
WELL STIM PROJ	TP		NR	NR	NR	NR	NR	0
HWTS	TP		NR	NR	NR	NR	NR	0
MINES MRDS	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		0	14	1	0	0	0	15

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

DOD **EDWARDS AIR FORCE BASE** **DOD** **CUSA140697**
Region **N/A**

EDWARDS AIR FORCE BASE (County), CA

< 1/8
1 ft.

DOD:
Feature 1: Air Force DOD
Feature 2: Not reported
Feature 3: Not reported
URL: Not reported
Name 1: Edwards Air Force Base
Name 2: Not reported
Name 3: Not reported
State: CA
DOD Site: Yes
Tile name: CAKERN

NPL **EDWARDS AIR FORCE BASE** **NPL** **1000155217**
Region **5 EAST POPSON AVE BLDG 2650** **SEMS** **CA1570024504**
East **EDWARDS AFB, CA 93524** **CORRACTS**
< 1/8 **RCRA-TSDF**
96 ft. **RCRA-LQG**
US ENG CONTROLS
US INST CONTROLS
ENVIROSTOR
HIST Cal-Sites
DEED
ROD
RAATS
PRP
ICIS
US AIRS
DOCKET HWC
ICE
PFAS

NPL:
Name: EDWARDS AIR FORCE BASE
Address: AFFTC EDWARDS AFB 5 EAST POPSON AVE, BLDG 2650A
City,State,Zip: EDWARDS AFB, CA 93524
EPA ID: CA1570024504
EPA Region: 9
Federal: Y
Final Date: 1990-08-30 00:00:00
Site ID: 902725
Latitude: 34.949438999999998
Site Score: 33.619999999999997
Longitude: -117.8857

Category:
EPA ID: CA1570024504
NPL Status: Currently on the Final NPL
Category Description: Depth To Aquifer-> 100 Feet
Category Value: 110

EPA ID: CA1570024504
NPL Status: Currently on the Final NPL
Category Description: Distance To Nearest Population-> 0 And <= 1/4 Mile
Category Value: 10

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Site:
EPA ID: CA1570024504
Site ID: 0902725
Site Status: F
Federal Site: Y
EPA Region: 09
Date Proposed: 07/14/89
Date Deleted: Not reported
Date Finalized: 08/30/90

Substance:
EPA ID: CA1570024504
NPL Status: Currently on the Final NPL
Substance ID: Not reported
Substance: Not reported
CAS #: Not reported
Pathway: Not reported
Scoring: Not reported

EPA ID: CA1570024504
NPL Status: Currently on the Final NPL
Substance ID: A020
Substance: CHROMIUM AND COMPOUNDS
CAS #: Not reported
Pathway: GROUND WATER PATHWAY
Scoring: 4

EPA ID: CA1570024504
NPL Status: Currently on the Final NPL
Substance ID: D004
Substance: ARSENIC
CAS #: 7440-38-2
Pathway: GROUND WATER PATHWAY
Scoring: 3

EPA ID: CA1570024504
NPL Status: Currently on the Final NPL
Substance ID: U036
Substance: CHLORDANE
CAS #: 57-74-9
Pathway: GROUND WATER PATHWAY
Scoring: 3

EPA ID: CA1570024504
NPL Status: Currently on the Final NPL
Substance ID: U061
Substance: DDT
CAS #: 50-29-3
Pathway: GROUND WATER PATHWAY
Scoring: 3

EPA ID: CA1570024504
NPL Status: Currently on the Final NPL
Substance ID: U077
Substance: DICHLOROETHANE, 1,2-
CAS #: 107-06-2

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Pathway: GROUND WATER PATHWAY
Scoring: 2

EPA ID: CA1570024504
NPL Status: Currently on the Final NPL
Substance ID: U079
Substance: TRANS-DICHLOROETHYLENE, 1,2-
CAS #: 156-60-5
Pathway: GROUND WATER PATHWAY
Scoring: 2

EPA ID: CA1570024504
NPL Status: Currently on the Final NPL
Substance ID: U210
Substance: TETRACHLOROETHENE
CAS #: 127-18-4
Pathway: GROUND WATER PATHWAY
Scoring: 2

EPA ID: CA1570024504
NPL Status: Currently on the Final NPL
Substance ID: U228
Substance: TRICHLOROETHYLENE (TCE)
CAS #: 79-01-6
Pathway: GROUND WATER PATHWAY
Scoring: 2

Summary Details:

Conditions at proposal July 14, 1989): Edwards Air Force Base EAFB) is in Kern, Los Angeles, and San Bernardino Counties, California, occupying approximately 800 square miles in the western portion of the Mojave Desert. The base has been in operation since 1933. Its primary mission is to conduct research and development on new aircraft. EAFB is participating in the Installation Restoration Program IRP), established in 1978. Under this program, the Department of Defense seeks to identify, investigate, and clean up contamination from ha ardous materials. Under IRP, the Air Force has identified 21 waste areas at the facility. The Main/South Base area, at the western edge of Rogers Dry Lake, is the primary area for maintenance and refueling of aircraft. On several occasions, large amounts of fuel have been spilled in the area, and poor disposal practices have released organic solvents to the ground. Also in the area are an abandoned sanitary landfill containing pesticides and heavy metals, an area where electroplating wastes were dumped, and the industrial waste pond, which contains sediments rich in heavy metals. Trichloroethylene, trans-1,2-dichloroethylene, 1,2-dichloroethane, tetrachloroethylene, and methylene chloride are present in ground water underlying the Main/South Base area, according to a 1987 IRP report. EAFB s 13,800 employees obtain drinking water from wells within 3 miles of the Main/South Base area. There is no perennial surface water at EAFB. The Air Force has completed an initial assessment of the base and is now conducting a remedial investigation/feasibility study to determine the type and extent of contamination and identify alternatives for remedial action. Status August 30, 1990): The Air Force is reviewing previous studies to determine any additional data needed to fully characteri e known waste areas. EPA, the State, and the Air Force arenegotiating an Interagency Agreement under CERCLA Section 120 covering response activities at the base.

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Site Status:
EPA ID: CA1570024504
NPL Status: Final
Proposed Date: 07/14/1989
Final Date: 08/30/1990
Deleted Date: Not reported

Narratives:
EPA ID: CA1570024504
NPL Name: EDWARDS AIR FORCE BASE

SEMS:
Site ID: 0902725
EPA ID: CA1570024504
Name: EDWARDS AIR FORCE BASE
Address: AFFTC EDWARDS AFB
Address 2: 5 EAST POPSON AVE, BLDG 2650A
City,State,Zip: EDWARDS AFB, CA 93524
Cong District: 21,23
FIPS Code: 06029
Latitude: 34.949439
Longitude: -117.885700
FF: Y
NPL: Currently on the Final NPL
Non NPL Status: Not reported

SEMS Detail:
Region: 09
Site ID: 0902725
EPA ID: CA1570024504
Site Name: EDWARDS AIR FORCE BASE
NPL: F
FF: Y
OU: 00
Action Code: DS
Action Name: DISCVRY
SEQ: 1
Start Date: 1980-08-01 04:00:00
Finish Date: 8/1/1980 4:00:00 AM
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0902725
EPA ID: CA1570024504
Site Name: EDWARDS AIR FORCE BASE
NPL: F
FF: Y
OU: 00
Action Code: NF
Action Name: NPL FINL
SEQ: 1
Start Date: 1990-08-30 04:00:00
Finish Date: 8/30/1990 4:00:00 AM
Qual: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Current Action Lead: EPA Perf

Region: 09
Site ID: 0902725
EPA ID: CA1570024504
Site Name: EDWARDS AIR FORCE BASE
NPL: F
FF: Y
OU: 00
Action Code: NP
Action Name: PROPOSED
SEQ: 1
Start Date: 1989-07-14 04:00:00
Finish Date: 7/14/1989 4:00:00 AM
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0902725
EPA ID: CA1570024504
Site Name: EDWARDS AIR FORCE BASE
NPL: F
FF: Y
OU: 00
Action Code: HR
Action Name: HAZRANK
SEQ: 1
Start Date: 1984-04-01 06:00:00
Finish Date: 4/1/1984 6:00:00 AM
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0902725
EPA ID: CA1570024504
Site Name: EDWARDS AIR FORCE BASE
NPL: F
FF: Y
OU: 00
Action Code: PA
Action Name: PA
SEQ: 2
Start Date: 1986-11-01 05:00:00
Finish Date: 11/1/1986 5:00:00 AM
Qual: L
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902725
EPA ID: CA1570024504
Site Name: EDWARDS AIR FORCE BASE
NPL: F
FF: Y
OU: 02
Action Code: LY
Action Name: FF RA
SEQ: 1

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Start Date: 2010-10-08 04:00:00
Finish Date: 9/30/2013 5:00:00 AM
Qual: IR
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902725
EPA ID: CA1570024504
Site Name: EDWARDS AIR FORCE BASE
NPL: F
FF: Y
OU: 02
Action Code: LW
Action Name: FF RI/FS
SEQ: 1
Start Date: 2004-09-29 04:00:00
Finish Date: 6/24/2009 5:00:00 AM
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902725
EPA ID: CA1570024504
Site Name: EDWARDS AIR FORCE BASE
NPL: F
FF: Y
OU: 09
Action Code: LW
Action Name: FF RI/FS
SEQ: 9
Start Date: 2005-08-12 04:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902725
EPA ID: CA1570024504
Site Name: EDWARDS AIR FORCE BASE
NPL: F
FF: Y
OU: 08
Action Code: LW
Action Name: FF RI/FS
SEQ: 11
Start Date: 2005-08-18 04:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902725
EPA ID: CA1570024504
Site Name: EDWARDS AIR FORCE BASE
NPL: F
FF: Y
OU: 11

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Action Code:	LW
Action Name:	FF RI/FS
SEQ:	13
Start Date:	2004-01-31 05:00:00
Finish Date:	8/4/2008 5:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0902725
EPA ID:	CA1570024504
Site Name:	EDWARDS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	11
Action Code:	RO
Action Name:	ROD
SEQ:	12
Start Date:	2008-08-04 05:00:00
Finish Date:	8/4/2008 5:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0902725
EPA ID:	CA1570024504
Site Name:	EDWARDS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	11
Action Code:	LX
Action Name:	FF RD
SEQ:	12
Start Date:	2008-08-04 05:00:00
Finish Date:	9/28/2009 4:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0902725
EPA ID:	CA1570024504
Site Name:	EDWARDS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	11
Action Code:	LY
Action Name:	FF RA
SEQ:	12
Start Date:	2008-08-04 05:00:00
Finish Date:	7/27/2011 5:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0902725
EPA ID:	CA1570024504
Site Name:	EDWARDS AIR FORCE BASE

EDWARDS AIR FORCE BASE (Continued) **1000155217**

NPL:	F
FF:	Y
OU:	13
Action Code:	NI
Action Name:	FF FS
SEQ:	1
Start Date:	2007-07-03 04:00:00
Finish Date:	9/21/2012 5:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0902725
EPA ID:	CA1570024504
Site Name:	EDWARDS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	13
Action Code:	RO
Action Name:	ROD
SEQ:	15
Start Date:	2012-09-21 05:00:00
Finish Date:	9/21/2012 5:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0902725
EPA ID:	CA1570024504
Site Name:	EDWARDS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	14
Action Code:	LV
Action Name:	FF RV
SEQ:	2
Start Date:	2012-03-07 05:00:00
Finish Date:	10/6/2014 5:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0902725
EPA ID:	CA1570024504
Site Name:	EDWARDS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	02
Action Code:	LX
Action Name:	FF RD
SEQ:	19
Start Date:	2009-06-24 05:00:00
Finish Date:	6/24/2009 5:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Site ID:	0902725
EPA ID:	CA1570024504
Site Name:	EDWARDS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	02
Action Code:	LY
Action Name:	FF RA
SEQ:	19
Start Date:	2009-06-24 05:00:00
Finish Date:	11/22/2010 5:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac

Region:	09
Site ID:	0902725
EPA ID:	CA1570024504
Site Name:	EDWARDS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	05
Action Code:	LV
Action Name:	FF RV
SEQ:	1
Start Date:	2009-11-20 05:00:00
Finish Date:	8/1/2011 4:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac

Region:	09
Site ID:	0902725
EPA ID:	CA1570024504
Site Name:	EDWARDS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	02
Action Code:	LX
Action Name:	FF RD
SEQ:	22
Start Date:	2013-02-06 05:00:00
Finish Date:	7/25/2013 4:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac

Region:	09
Site ID:	0902725
EPA ID:	CA1570024504
Site Name:	EDWARDS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	04
Action Code:	OM
Action Name:	OM
SEQ:	3
Start Date:	2009-10-26 04:00:00
Finish Date:	Not reported
Qual:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Current Action Lead: Fed Fac

Region: 09
Site ID: 0902725
EPA ID: CA1570024504
Site Name: EDWARDS AIR FORCE BASE
NPL: F
FF: Y
OU: 00
Action Code: PA
Action Name: PA
SEQ: 1
Start Date: 1986-10-01 04:00:00
Finish Date: 10/1/1986 4:00:00 AM
Qual: L
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902725
EPA ID: CA1570024504
Site Name: EDWARDS AIR FORCE BASE
NPL: F
FF: Y
OU: 01
Action Code: LW
Action Name: FF RI/FS
SEQ: 2
Start Date: 2004-07-30 04:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902725
EPA ID: CA1570024504
Site Name: EDWARDS AIR FORCE BASE
NPL: F
FF: Y
OU: 04
Action Code: LY
Action Name: FF RA
SEQ: 5
Start Date: 2007-11-06 05:00:00
Finish Date: 10/26/2009 4:00:00 AM
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902725
EPA ID: CA1570024504
Site Name: EDWARDS AIR FORCE BASE
NPL: F
FF: Y
OU: 15
Action Code: LX
Action Name: FF RD
SEQ: 5

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Start Date:	2009-09-16 04:00:00
Finish Date:	11/9/2010 5:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0902725
EPA ID:	CA1570024504
Site Name:	EDWARDS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	05
Action Code:	LW
Action Name:	FF RI/FS
SEQ:	5
Start Date:	2017-05-31 04:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0902725
EPA ID:	CA1570024504
Site Name:	EDWARDS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	06
Action Code:	OM
Action Name:	OM
SEQ:	5
Start Date:	2010-08-03 05:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0902725
EPA ID:	CA1570024504
Site Name:	EDWARDS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	15
Action Code:	LY
Action Name:	FF RA
SEQ:	4
Start Date:	2010-12-13 05:00:00
Finish Date:	5/12/2014 5:00:00 AM
Qual:	IR
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0902725
EPA ID:	CA1570024504
Site Name:	EDWARDS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	02

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Action Code:	RO
Action Name:	ROD
SEQ:	1
Start Date:	2009-06-24 05:00:00
Finish Date:	6/24/2009 5:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0902725
EPA ID:	CA1570024504
Site Name:	EDWARDS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	15
Action Code:	RO
Action Name:	ROD
SEQ:	5
Start Date:	2009-09-16 04:00:00
Finish Date:	9/16/2009 4:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0902725
EPA ID:	CA1570024504
Site Name:	EDWARDS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	04
Action Code:	LW
Action Name:	FF RI/FS
SEQ:	7
Start Date:	2004-01-31 05:00:00
Finish Date:	9/24/2007 4:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0902725
EPA ID:	CA1570024504
Site Name:	EDWARDS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	15
Action Code:	LW
Action Name:	FF RI/FS
SEQ:	4
Start Date:	2006-06-20 04:00:00
Finish Date:	9/16/2009 4:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0902725
EPA ID:	CA1570024504
Site Name:	EDWARDS AIR FORCE BASE

EDWARDS AIR FORCE BASE (Continued) **1000155217**

NPL: F
FF: Y
OU: 03
Action Code: RO
Action Name: ROD
SEQ: 2
Start Date: 2003-09-30 04:00:00
Finish Date: 9/30/2003 4:00:00 AM
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902725
EPA ID: CA1570024504
Site Name: EDWARDS AIR FORCE BASE
NPL: F
FF: Y
OU: 15
Action Code: OM
Action Name: OM
SEQ: 6
Start Date: 2014-05-12 05:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902725
EPA ID: CA1570024504
Site Name: EDWARDS AIR FORCE BASE
NPL: F
FF: Y
OU: 03
Action Code: LW
Action Name: FF RI/FS
SEQ: 3
Start Date: 1992-12-18 05:00:00
Finish Date: 3/30/1999 5:00:00 AM
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902725
EPA ID: CA1570024504
Site Name: EDWARDS AIR FORCE BASE
NPL: F
FF: Y
OU: 04
Action Code: LX
Action Name: FF RD
SEQ: 3
Start Date: 2007-09-24 04:00:00
Finish Date: 6/12/2009 5:00:00 AM
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Site ID:	0902725
EPA ID:	CA1570024504
Site Name:	EDWARDS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	02
Action Code:	LX
Action Name:	FF RD
SEQ:	1
Start Date:	2009-06-24 05:00:00
Finish Date:	10/31/2013 4:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac

Region:	09
Site ID:	0902725
EPA ID:	CA1570024504
Site Name:	EDWARDS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	00
Action Code:	SI
Action Name:	SI
SEQ:	1
Start Date:	1980-08-01 04:00:00
Finish Date:	4/1/1984 6:00:00 AM
Qual:	L
Current Action Lead:	Fed Fac

Region:	09
Site ID:	0902725
EPA ID:	CA1570024504
Site Name:	EDWARDS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	04
Action Code:	RO
Action Name:	ROD
SEQ:	3
Start Date:	2007-09-24 04:00:00
Finish Date:	9/24/2007 4:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac

Region:	09
Site ID:	0902725
EPA ID:	CA1570024504
Site Name:	EDWARDS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	10
Action Code:	LW
Action Name:	FF RI/FS
SEQ:	6
Start Date:	2006-11-22 05:00:00
Finish Date:	Not reported
Qual:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Current Action Lead: Fed Fac

Region: 09
Site ID: 0902725
EPA ID: CA1570024504
Site Name: EDWARDS AIR FORCE BASE
NPL: F
FF: Y
OU: 02
Action Code: LY
Action Name: FF RA
SEQ: 22
Start Date: 2020-03-04 06:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902725
EPA ID: CA1570024504
Site Name: EDWARDS AIR FORCE BASE
NPL: F
FF: Y
OU: 11
Action Code: OM
Action Name: OM
SEQ: 8
Start Date: 2011-07-27 05:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902725
EPA ID: CA1570024504
Site Name: EDWARDS AIR FORCE BASE
NPL: F
FF: Y
OU: 14
Action Code: LW
Action Name: FF RI/FS
SEQ: 15
Start Date: 2018-01-25 05:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902725
EPA ID: CA1570024504
Site Name: EDWARDS AIR FORCE BASE
NPL: F
FF: Y
OU: 12
Action Code: LW
Action Name: FF RI/FS
SEQ: 16

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Start Date: 2004-01-31 05:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902725
EPA ID: CA1570024504
Site Name: EDWARDS AIR FORCE BASE
NPL: F
FF: Y
OU: 07
Action Code: LW
Action Name: FF RI/FS
SEQ: 12
Start Date: 1996-09-30 04:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902725
EPA ID: CA1570024504
Site Name: EDWARDS AIR FORCE BASE
NPL: F
FF: Y
OU: 06
Action Code: RO
Action Name: ROD
SEQ: 4
Start Date: 2006-09-28 04:00:00
Finish Date: 9/28/2006 4:00:00 AM
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902725
EPA ID: CA1570024504
Site Name: EDWARDS AIR FORCE BASE
NPL: F
FF: Y
OU: 06
Action Code: LX
Action Name: FF RD
SEQ: 4
Start Date: 2007-10-18 04:00:00
Finish Date: 2/15/2008 5:00:00 AM
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902725
EPA ID: CA1570024504
Site Name: EDWARDS AIR FORCE BASE
NPL: F
FF: Y
OU: 16

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Action Code:	LW
Action Name:	FF RI/FS
SEQ:	17
Start Date:	2010-02-04 05:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0902725
EPA ID:	CA1570024504
Site Name:	EDWARDS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	06
Action Code:	LX
Action Name:	FF RD
SEQ:	18
Start Date:	2006-09-28 04:00:00
Finish Date:	9/28/2006 4:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0902725
EPA ID:	CA1570024504
Site Name:	EDWARDS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	17
Action Code:	LW
Action Name:	FF RI/FS
SEQ:	18
Start Date:	2005-08-12 04:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0902725
EPA ID:	CA1570024504
Site Name:	EDWARDS AIR FORCE BASE
NPL:	F
FF:	Y
OU:	06
Action Code:	LY
Action Name:	FF RA
SEQ:	18
Start Date:	2006-09-28 04:00:00
Finish Date:	2/15/2008 5:00:00 AM
Qual:	Not reported
Current Action Lead:	Fed Fac
Region:	09
Site ID:	0902725
EPA ID:	CA1570024504
Site Name:	EDWARDS AIR FORCE BASE

EDWARDS AIR FORCE BASE (Continued) **1000155217**

NPL: F
FF: Y
OU: 06
Action Code: LY
Action Name: FF RA
SEQ: 3
Start Date: 2008-02-15 05:00:00
Finish Date: 8/31/2010 4:00:00 AM
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902725
EPA ID: CA1570024504
Site Name: EDWARDS AIR FORCE BASE
NPL: F
FF: Y
OU: 06
Action Code: LW
Action Name: FF RI/FS
SEQ: 8
Start Date: 2003-11-11 05:00:00
Finish Date: 9/28/2006 4:00:00 AM
Qual: Not reported
Current Action Lead: Fed Fac

CORRACTS:
Name: EDWARDS AIR FORCE BASE
Address: 446 N. ROSAMOND BLVD BLDG 4916
Address 2: Not reported
Area Name: ENTIRE FACILITY
Corrective Action: CA050
Actual Date: 1993-09-01 00:00:00.0
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: EDWARDS AIR FORCE BASE
Address: 446 N. ROSAMOND BLVD BLDG 4916
Address 2: Not reported
Area Name: ENTIRE FACILITY
Corrective Action: CA070YE
Actual Date: 1993-09-01 00:00:00.0
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: EDWARDS AIR FORCE BASE
Address: 446 N. ROSAMOND BLVD BLDG 4916
Address 2: Not reported
Area Name: OU #1
Corrective Action: CA100
Actual Date: 1990-09-24 00:00:00.0
Air Release Indicator: Y

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Groundwater Release Indicator: Y
Soil Release Indicator: Y
Surface Water Release Indicator: Y

Name: EDWARDS AIR FORCE BASE
Address: 446 N. ROSAMOND BLVD BLDG 4916
Address 2: Not reported
Area Name: OU #1
Corrective Action: CA200
Actual Date: 1996-04-01 00:00:00.0
Air Release Indicator: Y
Groundwater Release Indicator: Y
Soil Release Indicator: Y
Surface Water Release Indicator: Y

Name: EDWARDS AIR FORCE BASE
Address: 446 N. ROSAMOND BLVD BLDG 4916
Address 2: Not reported
Area Name: OU #1
Corrective Action: CA600GW
Actual Date: 1990-09-24 00:00:00.0
Air Release Indicator: Y
Groundwater Release Indicator: Y
Soil Release Indicator: Y
Surface Water Release Indicator: Y

Name: EDWARDS AIR FORCE BASE
Address: 446 N. ROSAMOND BLVD BLDG 4916
Address 2: Not reported
Area Name: OU #1
Corrective Action: CA600SR
Actual Date: 1990-09-24 00:00:00.0
Air Release Indicator: Y
Groundwater Release Indicator: Y
Soil Release Indicator: Y
Surface Water Release Indicator: Y

Name: EDWARDS AIR FORCE BASE
Address: 446 N. ROSAMOND BLVD BLDG 4916
Address 2: Not reported
Area Name: OU #1
Corrective Action: CA650
Actual Date: 1997-12-01 00:00:00.0
Air Release Indicator: Y
Groundwater Release Indicator: Y
Soil Release Indicator: Y
Surface Water Release Indicator: Y

Name: EDWARDS AIR FORCE BASE
Address: 446 N. ROSAMOND BLVD BLDG 4916
Address 2: Not reported
Area Name: ENTIRE FACILITY
Corrective Action: CA725IN
Actual Date: 2000-05-22 00:00:00.0
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Surface Water Release Indicator: Not reported

Name: EDWARDS AIR FORCE BASE
Address: 446 N. ROSAMOND BLVD BLDG 4916
Address 2: Not reported
Area Name: ENTIRE FACILITY
Corrective Action: CA725NO
Actual Date: 1998-04-06 00:00:00.0
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: EDWARDS AIR FORCE BASE
Address: 446 N. ROSAMOND BLVD BLDG 4916
Address 2: Not reported
Area Name: ENTIRE FACILITY
Corrective Action: CA725YE
Actual Date: 2004-08-03 00:00:00.0
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: EDWARDS AIR FORCE BASE
Address: 446 N. ROSAMOND BLVD BLDG 4916
Address 2: Not reported
Area Name: ENTIRE FACILITY
Corrective Action: CA750IN
Actual Date: 2000-05-22 00:00:00.0
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Click this hyperlink while viewing on your computer to access
3 additional CORRACTS: record(s) in the EDR Site Report.

RCRA-LQG:
Date Form Received by Agency: 2018-10-19 00:00:00.0
Handler Name: EDWARDS AIR FORCE BASE
Handler Address: 446 N. ROSAMOND BLVD BLDG 4916
Handler City,State,Zip: EDWARDS, CA 93524-1130
EPA ID: CA1570024504
Contact Name: D MALAMA CHOCK
Contact Address: NORTH ROSAMOND BLVD, STE A
Contact City,State,Zip: EDWARDS, CA 93524
Contact Telephone: 661-277-3454
Contact Fax: 661-277-1460
Contact Email: D_MALAMA.CHOCK@US.AF.MIL
Contact Title: CHIEF, WATER AND WASTE OPS SECTION
EPA Region: 09
Land Type: Federal
Federal Waste Generator Description: Large Quantity Generator
Non-Notifier: Not reported
Biennial Report Cycle: 2017
Accessibility: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Active Site Indicator:	Handler Activities, Permitting Activities, Corrective Action Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	NORTH ROSAMOND BLVD, STE A
Mailing City,State,Zip:	EDWARDS, CA 93524
Owner Name:	EDWARDS AIR FORCE BASE
Owner Type:	Federal
Operator Name:	EDWARDS AIR FORCE BASE
Operator Type:	Federal
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	Yes
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	Yes
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Storage, Treatment
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	The land is federally-owned, The site is federally-owned, The site is federally-operated
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Land Disposal, Storage, Treatment
2018 GPRA Permit Baseline:	Accomplished
2018 GPRA Renewals Baseline:	Accomplished
Permit Renewals Workload Universe:	Storage, Treatment
Permit Workload Universe:	Storage, Treatment
Permit Progress Universe:	Land Disposal, Storage, Treatment
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	Yes
Subject to Corrective Action Universe:	Yes
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	Yes
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	Yes
Groundwater Controls Indicator:	Yes
Operating TSDF Universe:	Storage, Treatment
Full Enforcement Universe:	Storage, Treatment
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Financial Assurance Required:	Not reported
Handler Date of Last Change:	2018-11-26 18:57:03.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	Not reported

Biennial: List of Years
Year: 2017

Click Here for Biennial Reporting System Data:
Year: 2015

Click Here for Biennial Reporting System Data:
Year: 2013

Click Here for Biennial Reporting System Data:
Year: 2011

Click Here for Biennial Reporting System Data:
Year: 2009

Click Here for Biennial Reporting System Data:
Year: 2007

Click Here for Biennial Reporting System Data:
Year: 2005

Click Here for Biennial Reporting System Data:
Year: 2003

Click Here for Biennial Reporting System Data:
Year: 2001

Click Here for Biennial Reporting System Data:

Hazardous Waste Summary:

Waste Code:	D001
Waste Description:	IGNITABLE WASTE
Waste Code:	D002
Waste Description:	CORROSIVE WASTE
Waste Code:	D003
Waste Description:	REACTIVE WASTE
Waste Code:	D004
Waste Description:	ARSENIC
Waste Code:	D005
Waste Description:	BARIUM
Waste Code:	D006

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Waste Description: CADMIUM

Waste Code: D007
Waste Description: CHROMIUM

Waste Code: D008
Waste Description: LEAD

Waste Code: D009
Waste Description: MERCURY

Waste Code: D010
Waste Description: SELENIUM

Waste Code: D011
Waste Description: SILVER

Waste Code: D012
Waste Description: ENDRIN (1,2,3,4,10,10-HEXACHLORO-1,7-EPOXY-1,4,4A,5,6,7,8,8A-OCTAHYDRO-1,4-ENDO, ENDO-5,8-DIMETH-ANO-NAPHTHALENE)

Waste Code: D013
Waste Description: LINDANE (1,2,3,4,5,6-HEXA-CHLOROCYCLOHEXANE, GAMMA ISOMER)

Waste Code: D014
Waste Description: METHOXYCHLOR (1,1,1-TRICHLORO-2,2-BIS [P-METHOXYPHENYL] ETHANE)

Waste Code: D015
Waste Description: TOXAPHENE (C10 H10 CL8, TECHNICAL CHLORINATED CAMPHENE, 67-69 PERCENT CHLORINE)

Waste Code: D016
Waste Description: 2,4-D (2,4-DICHLOROPHENOXYACETIC ACID)

Waste Code: D017
Waste Description: 2,4,5-TP SILVEX (2,4,5-TRICHLOROPHENOXYPROPIONIC ACID)

Waste Code: D018
Waste Description: BENZENE

Waste Code: D019
Waste Description: CARBON TETRACHLORIDE

Waste Code: D020
Waste Description: CHLORDANE

Waste Code: D021
Waste Description: CHLOROBENZENE

Waste Code: D022
Waste Description: CHLOROFORM

Waste Code: D023
Waste Description: O-CRESOL

Waste Code: D024

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Waste Description: M-CRESOL

Waste Code: D025
Waste Description: P-CRESOL

Waste Code: D026
Waste Description: CRESOL

Waste Code: D027
Waste Description: 1,4-DICHLOROBENZENE

Waste Code: D028
Waste Description: 1,2-DICHLOROETHANE

Waste Code: D029
Waste Description: 1,1-DICHLOROETHYLENE

Waste Code: D030
Waste Description: 2,4-DINITROTOLUENE

Waste Code: D031
Waste Description: HEPTACHLOR (AND ITS EPOXIDE)

Waste Code: D032
Waste Description: HEXACHLOROBENZENE

Waste Code: D033
Waste Description: HEXACHLOROBUTADIENE

Waste Code: D034
Waste Description: HEXACHLOROETHANE

Waste Code: D035
Waste Description: METHYL ETHYL KETONE

Waste Code: D036
Waste Description: NITROBENZENE

Waste Code: D037
Waste Description: PENTACHLOROPHENOL

Waste Code: D038
Waste Description: PYRIDINE

Waste Code: D039
Waste Description: TETRACHLOROETHYLENE

Waste Code: D040
Waste Description: TRICHLORETHYLENE

Waste Code: D041
Waste Description: 2,4,5-TRICHLOROPHENOL

Waste Code: D042
Waste Description: 2,4,6-TRICHLOROPHENOL

Waste Code: D043

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Waste Description: VINYL CHLORIDE

Waste Code: F001
Waste Description: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLORETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste Code: F002
Waste Description: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste Code: F003
Waste Description: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste Code: F004
Waste Description: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: CRESOLS, CRESYLIC ACID, AND NITROBENZENE; AND THE STILL BOTTOMS FROM THE RECOVERY OF THESE SOLVENTS; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste Code: F005
Waste Description: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste Code: F006
Waste Description: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS, EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS)

EDWARDS AIR FORCE BASE (Continued) **1000155217**

ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC, AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.

Waste Code: F027
Waste Description: DISCARDED UNUSED FORMULATIONS CONTAINING TRI-, TETRA-, OR PENTACHLOROPHENOL OR DISCARDED UNUSED FORMULATIONS CONTAINING COMPOUNDS DERIVED FROM THESE CHLOROPHENOLS. (THIS LISTING DOES NOT INCLUDE FORMULATIONS CONTAINING HEXACHLOROPHENE SYNTHESIZED FROM PREPURIFIED 2,4,5-TRICHLOROPHENOL AS THE SOLE COMPONENT.)

Waste Code: P001
Waste Description: 2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYLBUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3% (OR) WARFARIN, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3%

Waste Code: P003
Waste Description: 2-PROPENAL (OR) ACROLEIN

Waste Code: P005
Waste Description: 2-PROPEN-1-OL (OR) ALLYL ALCOHOL

Waste Code: P012
Waste Description: ARSENIC OXIDE AS2O3 (OR) ARSENIC TRIOXIDE

Waste Code: P014
Waste Description: BENZENETHIOL (OR) THIOPHENOL

Waste Code: P027
Waste Description: 3-CHLOROPROPIONITRILE (OR) PROPANENITRILE, 3-CHLORO-

Waste Code: P028
Waste Description: BENZENE, (CHLOROMETHYL)- (OR) BENZYL CHLORIDE

Waste Code: P029
Waste Description: COPPER CYANIDE (OR) COPPER CYANIDE CU(CN)

Waste Code: P030
Waste Description: CYANIDES (SOLUBLE CYANIDE SALTS), NOT OTHERWISE SPECIFIED

Waste Code: P031
Waste Description: CYANOGEN (OR) ETHANEDINITRILE

Waste Code: P033
Waste Description: CYANOGEN CHLORIDE (OR) CYANOGEN CHLORIDE (CN)CL

Waste Code: P037
Waste Description: 2,7:3,6-DIMETHANONAPHTH[2,3-B]OXIRENE, 3,4,5,6,9,9-HEXACHLORO-1A,2,2A,3,6,6A,7,7A-OCTAHYDRO-, (1AALPHA, 2BETA, 2AALPHA, 3BETA, 6BETA, 6AALPHA, 7BETA, 7AALPHA)- (OR) DIELDRIN

Waste Code: P047
Waste Description: 4,6-DINITRO-O-CRESOL, & SALTS (OR) PHENOL, 2-METHYL-4,6-DINITRO-, & SALTS

Waste Code: P048

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Waste Description: 2,4-DINITROPHENOL (OR) PHENOL, 2,4-DINITRO-

Waste Code: P050
Waste Description: 6,9-METHANO-2,4,3-BENZODIOXATHIEPIN,6,7,8,9,10,10-HEXACHLORO-1,5,5A,6, 9,9A-HEXAHYDRO-,3-OXIDE (OR) ENDOSULFAN

Waste Code: P051
Waste Description: 2,7:3,6-DIMETHANONAPHTH[2,3-B]OXIRENE, 3,4,5,6,9,9-HEXACHLORO-1A,2,2A,3,6,6A,7,7A-OCTAHYDRO-, (1AALPHA, 2BETA, 2ABETA, 3ALPHA, 6ALPHA, 6ABETA, 7BETA, 7AALPHA)- & METABOLITES (OR) ENDRIN (OR) ENDRIN, & METABOLITES

Waste Code: P056
Waste Description: FLUORINE

Waste Code: P059
Waste Description: 4,7-METHANO-1H-INDENE, 1,4,5,6,7,8,8-HEPTACHLORO-3A,4,7,7A-TETRAHYDRO- (OR) HEPTACHLOR

Waste Code: P063
Waste Description: HYDROCYANIC ACID (OR) HYDROGEN CYANIDE

Waste Code: P068
Waste Description: HYDRAZINE, METHYL- (OR) METHYL HYDRAZINE

Waste Code: P073
Waste Description: NICKEL CARBONYL (OR) NICKEL CARBONYL NI(CO)4, (T-4)-

Waste Code: P077
Waste Description: BENZENAMINE, 4-NITRO- (OR) P-NITROANILINE

Waste Code: P078
Waste Description: NITROGEN DIOXIDE (OR) NITROGEN OXIDE NO2

Waste Code: P098
Waste Description: POTASSIUM CYANIDE (OR) POTASSIUM CYANIDE K(CN)

Waste Code: P104
Waste Description: SILVER CYANIDE (OR) SILVER CYANIDE AG(CN)

Waste Code: P105
Waste Description: SODIUM AZIDE

Waste Code: U001
Waste Description: ACETALDEHYDE (I) (OR) ETHANAL (I)

Waste Code: U002
Waste Description: 2-PROPANONE (I) (OR) ACETONE (I)

Waste Code: U003
Waste Description: ACETONITRILE (I,T)

Waste Code: U004
Waste Description: ACETOPHENONE (OR) ETHANONE, 1-PHENYL-

Waste Code: U007
Waste Description: 2-PROPENAMIDE (OR) ACRYLAMIDE

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Waste Code: U008
Waste Description: 2-PROPENOIC ACID (I) (OR) ACRYLIC ACID (I)

Waste Code: U009
Waste Description: 2-PROPENENITRILE (OR) ACRYLONITRILE

Waste Code: U012
Waste Description: ANILINE (I,T) (OR) BENZENAMINE (I,T)

Waste Code: U019
Waste Description: BENZENE (I,T)

Waste Code: U029
Waste Description: METHANE, BROMO- (OR) METHYL BROMIDE

Waste Code: U031
Waste Description: 1-BUTANOL (I) (OR) N-BUTYL ALCOHOL (I)

Waste Code: U034
Waste Description: ACETALDEHYDE, TRICHLORO- (OR) CHLORAL

Waste Code: U037
Waste Description: BENZENE, CHLORO- (OR) CHLOROBENZENE

Waste Code: U041
Waste Description: EPICHLOROHYDRIN (OR) OXIRANE, (CHLOROMETHYL)-

Waste Code: U042
Waste Description: 2-CHLOROETHYL VINYL ETHER (OR) ETHENE, (2-CHLOROETHOXY)-

Waste Code: U044
Waste Description: CHLOROFORM (OR) METHANE, TRICHLORO-

Waste Code: U045
Waste Description: METHANE, CHLORO- (I,T) (OR) METHYL CHLORIDE (I,T)

Waste Code: U048
Waste Description: O-CHLOROPHENOL (OR) PHENOL, 2-CHLORO-

Waste Code: U053
Waste Description: 2-BUTENAL (OR) CROTONALDEHYDE

Waste Code: U056
Waste Description: BENZENE, HEXAHYDRO- (I) (OR) CYCLOHEXANE (I)

Waste Code: U057
Waste Description: CYCLOHEXANONE (I)

Waste Code: U060
Waste Description: BENZENE, 1,1'-(2,2-DICHLOROETHYLIDENE)BIS[4-CHLORO- (OR) DDD

Waste Code: U061
Waste Description: BENZENE, 1,1'-(2,2,2-TRICHLOROETHYLIDENE)BIS[4-CHLORO- (OR) DDT

Waste Code: U066
Waste Description: 1,2-DIBROMO-3-CHLOROPROPANE (OR) PROPANE, 1,2-DIBROMO-3-CHLORO-

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Waste Code: U067
Waste Description: ETHANE, 1,2-DIBROMO- (OR) ETHYLENE DIBROMIDE

Waste Code: U068
Waste Description: METHANE, DIBROMO- (OR) METHYLENE BROMIDE

Waste Code: U069
Waste Description: 1,2-BENZENEDICARBOXYLIC ACID, DIBUTYL ESTER (OR) DIBUTYL PHTHALATE

Waste Code: U070
Waste Description: BENZENE, 1,2-DICHLORO- (OR) O-DICHLOROBENZENE

Waste Code: U071
Waste Description: BENZENE, 1,3-DICHLORO- (OR) M-DICHLOROBENZENE

Waste Code: U072
Waste Description: BENZENE, 1,4-DICHLORO- (OR) P-DICHLOROBENZENE

Waste Code: U074
Waste Description: 1,4-DICHLORO-2-BUTENE (I,T) (OR) 2-BUTENE, 1,4-DICHLORO- (I,T)

Waste Code: U076
Waste Description: ETHANE, 1,1-DICHLORO- (OR) ETHYLIDENE DICHLORIDE

Waste Code: U077
Waste Description: ETHANE, 1,2-DICHLORO- (OR) ETHYLENE DICHLORIDE

Waste Code: U078
Waste Description: 1,1-DICHLOROETHYLENE (OR) ETHENE, 1,1-DICHLORO-

Waste Code: U080
Waste Description: METHANE, DICHLORO- (OR) METHYLENE CHLORIDE

Waste Code: U081
Waste Description: 2,4-DICHLOROPHENOL (OR) PHENOL, 2,4-DICHLORO-

Waste Code: U084
Waste Description: 1,3-DICHLOROPROPENE (OR) 1-PROPENE, 1,3-DICHLORO-

Waste Code: U085
Waste Description: 1,2:3,4-DIEPOXYBUTANE (I,T) (OR) 2,2'-BIOXIRANE

Waste Code: U098
Waste Description: 1,1-DIMETHYLHYDRAZINE (OR) HYDRAZINE, 1,1-DIMETHYL-

Waste Code: U101
Waste Description: 2,4-DIMETHYLPHENOL (OR) PHENOL, 2,4-DIMETHYL-

Waste Code: U103
Waste Description: DIMETHYL SULFATE (OR) SULFURIC ACID, DIMETHYL ESTER

Waste Code: U108
Waste Description: 1,4-DIETHYLENEOXIDE (OR) 1,4-DIOXANE

Waste Code: U112
Waste Description: ACETIC ACID, ETHYL ESTER (I) (OR) ETHYL ACETATE (I)

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Waste Code: U121
Waste Description: METHANE, TRICHLOROFLUORO- (OR) TRICHLOROMONOFLUOROMETHANE

Waste Code: U122
Waste Description: FORMALDEHYDE

Waste Code: U123
Waste Description: FORMIC ACID (C,T)

Waste Code: U128
Waste Description: 1,3-BUTADIENE, 1,1,2,3,4,4-HEXACHLORO- (OR) HEXACHLOROBUTADIENE

Waste Code: U129
Waste Description: CYCLOHEXANE, 1,2,3,4,5,6-HEXACHLORO-, (1ALPHA, 2ALPHA, 3BETA, 4ALPHA, 5ALPHA, 6BETA)- (OR) LINDANE

Waste Code: U131
Waste Description: ETHANE, HEXACHLORO- (OR) HEXACHLOROETHANE

Waste Code: U133
Waste Description: HYDRAZINE (R,T)

Waste Code: U134
Waste Description: HYDROFLUORIC ACID (C,T) (OR) HYDROGEN FLUORIDE (C,T)

Waste Code: U135
Waste Description: HYDROGEN SULFIDE (OR) HYDROGEN SULFIDE H2S

Waste Code: U138
Waste Description: METHANE, IODO- (OR) METHYL IODIDE

Waste Code: U140
Waste Description: 1-PROPANOL, 2-METHYL- (I,T) (OR) ISOBUTYL ALCOHOL (I,T)

Waste Code: U144
Waste Description: ACETIC ACID, LEAD(2+) SALT (OR) LEAD ACETATE

Waste Code: U147
Waste Description: 2,5-FURANDIONE (OR) MALEIC ANHYDRIDE

Waste Code: U149
Waste Description: MALONONITRILE (OR) PROPANEDINITRILE

Waste Code: U150
Waste Description: L-PHENYLALANINE, 4-[BIS(2-CHLOROETHYL)AMINO]- (OR) MELPHALAN

Waste Code: U151
Waste Description: MERCURY

Waste Code: U152
Waste Description: 2-PROPENENITRILE, 2-METHYL- (I,T) (OR) METHACRYLONITRILE (I,T)

Waste Code: U154
Waste Description: METHANOL (I) (OR) METHYL ALCOHOL (I)

Waste Code: U159
Waste Description: 2-BUTANONE (I,T) (OR) METHYL ETHYL KETONE (MEK) (I,T)

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Waste Code: U161
Waste Description: 4-METHYL-2-PENTANONE (I) (OR) METHYL ISOBUTYL KETONE (I) (OR) PENTANOL, 4-METHYL-

Waste Code: U162
Waste Description: 2-PROPENOIC ACID, 2-METHYL-, METHYL ESTER (I,T) (OR) METHYL METHACRYLATE (I,T)

Waste Code: U165
Waste Description: NAPHTHALENE

Waste Code: U169
Waste Description: BENZENE, NITRO- (OR) NITROBENZENE (I,T)

Waste Code: U170
Waste Description: P-NITROPHENOL (I,T) (OR) PHENOL, 4-NITRO-

Waste Code: U171
Waste Description: 2-NITROPROPANE (I,T) (OR) PROPANE, 2-NITRO- (I,T)

Waste Code: U172
Waste Description: 1-BUTANAMINE, N-BUTYL-N-NITROSO- (OR) N-NITROSODI-N-BUTYLAMINE

Waste Code: U182
Waste Description: 1,3,5-TRIOXANE, 2,4,6-TRIMETHYL- (OR) PARALDEHYDE

Waste Code: U184
Waste Description: ETHANE, PENTACHLORO- (OR) PENTACHLOROETHANE

Waste Code: U188
Waste Description: PHENOL

Waste Code: U194
Waste Description: 1-PROPANAMINE (I,T) (OR) N-PROPYLAMINE (I,T)

Waste Code: U196
Waste Description: PYRIDINE

Waste Code: U208
Waste Description: 1,1,1,2-TETRACHLOROETHANE (OR) ETHANE, 1,1,1,2-TETRACHLORO-

Waste Code: U209
Waste Description: 1,1,2,2-TETRACHLOROETHANE (OR) ETHANE, 1,1,2,2-TETRACHLORO-

Waste Code: U210
Waste Description: ETHENE, TETRACHLORO- (OR) TETRACHLOROETHYLENE

Waste Code: U211
Waste Description: CARBON TETRACHLORIDE (OR) METHANE, TETRACHLORO-

Waste Code: U213
Waste Description: FURAN, TETRAHYDRO-(I) (OR) TETRAHYDROFURAN (I)

Waste Code: U219
Waste Description: THIOUREA

Waste Code: U220

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Waste Description: BENZENE, METHYL- (OR) TOLUENE

Waste Code: U221
Waste Description: BENZENEDIAMINE, AR-METHYL- (OR) TOLUENEDIAMINE

Waste Code: U222
Waste Description: BENZENAMINE, 2-METHYL-, HYDROCHLORIDE (OR) O-TOLUIDINE HYDROCHLORIDE

Waste Code: U223
Waste Description: BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T) (OR) TOLUENE DIISOCYANATE (R,T)

Waste Code: U226
Waste Description: ETHANE, 1,1,1-TRICHLORO- (OR) METHYL CHLOROFORM

Waste Code: U227
Waste Description: 1,1,2-TRICHLOROETHANE (OR) ETHANE, 1,1,2-TRICHLORO-

Waste Code: U228
Waste Description: ETHENE, TRICHLORO- (OR) TRICHLOROETHYLENE

Waste Code: U239
Waste Description: BENZENE, DIMETHYL- (I,T) (OR) XYLENE (I)

Waste Code: U359
Waste Description: ETHANOL, 2-ETHOXY- (OR) ETHYLENE GLYCOL MONOETHYL ETHER

Handler - Owner Operator:
Owner/Operator Indicator: Operator
Owner/Operator Name: USAF
Legal Status: Federal
Date Became Current: 1994-11-28 00:00:00.
Date Ended Current: Not reported
Owner/Operator Address: Not reported
Owner/Operator City,State,Zip: Not reported
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: EDWARDS AIR FORCE BASE
Legal Status: Federal
Date Became Current: 1950-01-01 00:00:00.
Date Ended Current: Not reported
Owner/Operator Address: 446 N. ROSAMOND BLVD BLDG 4916
Owner/Operator City,State,Zip: EDWARDS, CA 93524-1130
Owner/Operator Telephone: 661-277-3454
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: 661-277-1460
Owner/Operator Email: D_MALAMA.CHOCK@US.AF.MIL

Owner/Operator Indicator: Operator
Owner/Operator Name: MULTIPLE OPS - ALL USAF COMMANDS
Legal Status: Federal
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: AFFTC EDWARDS AFB

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Owner/Operator City,State,Zip:	CITY NOT REPORTED, CA 99999
Owner/Operator Telephone:	805-277-3010
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	USAF
Legal Status:	Federal
Date Became Current:	1951-09-25 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	5 EAST POPSON AVE
Owner/Operator City,State,Zip:	EDWARDS AFB, CA 93524
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	EDWARDS AIR FORCE BASE
Legal Status:	Federal
Date Became Current:	1950-01-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	120 N. ROSAMOND BLVD.
Owner/Operator City,State,Zip:	EDWARD, CA 93524
Owner/Operator Telephone:	661-277-1401
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	UNITED STATES AIR FORCE
Legal Status:	Federal
Date Became Current:	1950-01-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	12 LABOBORATORY ROAD BLDG 4231
Owner/Operator City,State,Zip:	EDWARDS, CA 93524
Owner/Operator Telephone:	661-277-9252
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	UNITED STATES AIR FORCE
Legal Status:	Federal
Date Became Current:	1951-09-25 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	5 EAST POPSON AVENUE BUILDING 2
Owner/Operator City,State,Zip:	EDWARDS AFB, CA 93524-8060
Owner/Operator Telephone:	661-277-1478
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	UNITED STATES AIR FORCE
Legal Status:	Federal

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Date Became Current:	1951-09-25 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	EDWARDS AFB
Legal Status:	Federal
Date Became Current:	1950-01-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	UNITED STATES AIR FORCE
Legal Status:	Federal
Date Became Current:	1950-01-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	12 LABOBORATORY ROAD BLDG 4231
Owner/Operator City,State,Zip:	EDWARDS, CA 93524
Owner/Operator Telephone:	661-277-9252
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	UNITED STATES AIR FORCE
Legal Status:	Federal
Date Became Current:	1951-09-25 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	5 EAST POPSON AVENUE
Owner/Operator City,State,Zip:	EDWARDS AFB, CA 93524
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	EDWARDS AIR FORCE BASE
Legal Status:	Federal
Date Became Current:	1950-01-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	120 NORTH ROSAMOND BLVD, STE A
Owner/Operator City,State,Zip:	EDWARDS, CA 93524
Owner/Operator Telephone:	661-277-3454
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	661-277-1460
Owner/Operator Email:	D_MALAMA.CHOCK@US.AF.MIL

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Owner/Operator Indicator:	Owner
Owner/Operator Name:	USAF
Legal Status:	Federal
Date Became Current:	1951-09-25 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	SAME AS IN ITEM 4
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	UNITED STATES AIR FORCE
Legal Status:	Federal
Date Became Current:	1951-09-25 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	5 EAST POPSON AVE, BLDG 2650
Owner/Operator City,State,Zip:	EDWARDS AFB, CA 93524
Owner/Operator Telephone:	661-277-1401
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	UNITED STATES AIR FORCE
Legal Status:	Federal
Date Became Current:	1994-11-28 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	USAF
Legal Status:	Federal
Date Became Current:	1994-11-28 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	MULTIPLE OPS - ALL USAF COMMANDS
Legal Status:	Federal
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	AFFTC EDWARDS AFB
Owner/Operator City,State,Zip:	EDWARDS AFB, CA 93524-1130
Owner/Operator Telephone:	805-277-3010
Owner/Operator Telephone Ext:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	UNITED STATES AIR FORCE
Legal Status:	Federal
Date Became Current:	1994-11-28 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	2010-07-13 00:00:00.0
Handler Name:	EDWARDS AIR FORCE BASE
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	Yes
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported
Receive Date:	2012-09-11 00:00:00.0
Handler Name:	EDWARDS AIR FORCE BASE
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	Yes
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported
Receive Date:	2016-02-29 00:00:00.0
Handler Name:	EDWARDS AIR FORCE BASE
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	Yes
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported
Receive Date:	2014-03-01 00:00:00.0
Handler Name:	EDWARDS AIR FORCE BASE

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	2018-10-19 00:00:00.0
Handler Name:	EDWARDS AIR FORCE BASE
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	Yes
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	No
Electronic Manifest Broker:	No

Receive Date:	1996-09-01 00:00:00.0
Handler Name:	USAF EDWARDS AFB
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	1980-08-18 00:00:00.0
Handler Name:	USAF EDWARDS AFB
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	1980-08-18 00:00:00.0
Handler Name:	USAF EDWARDS AFB
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	1998-02-02 00:00:00.0
Handler Name:	USAF EDWARDS AFB
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	1990-04-27 00:00:00.0
Handler Name:	EDWARDS AFB/ EXPLOSIVE ORDINACE
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	1992-04-25 00:00:00.0
Handler Name:	EDWARDS AIR FORCE BASE
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	1994-03-29 00:00:00.0
Handler Name:	USAF FLIGHT TEST CTR EDWARDS AFB
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Receive Date:	1996-03-27 00:00:00.0
Handler Name:	USAF EDWARDS
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	1999-03-04 00:00:00.0
Handler Name:	EDWARDS AIR FORCE BASE
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	2000-10-12 00:00:00.0
Handler Name:	EDWARDS AIR FORCE BASE
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	2002-03-29 00:00:00.0
Handler Name:	EDWARDS AIRFORCE BASE
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	2004-02-26 00:00:00.0
Handler Name:	EDWARDS AIR FORCE BASE
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	Yes

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	2006-02-15 00:00:00.0
Handler Name:	EDWARDS AIR FORCE BASE
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	Yes
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	2008-02-29 00:00:00.0
Handler Name:	EDWARDS AIR FORCE BASE
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	Yes
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	92119
NAICS Description:	OTHER GENERAL GOVERNMENT SUPPORT

NAICS Code:	92711
NAICS Description:	SPACE RESEARCH AND TECHNOLOGY

NAICS Code:	92811
NAICS Description:	NATIONAL SECURITY

NAICS Code:	928110
NAICS Description:	NATIONAL SECURITY

Facility Has Received Notices of Violation:

Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD IS-General
Date Violation was Determined:	2017-11-14 00:00:00.0
Actual Return to Compliance Date:	2017-12-15 00:00:00.0
Return to Compliance Qualifier:	Documented
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Enforcement Identifier: 307
Date of Enforcement Action: 2017-11-16 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - General
Date Violation was Determined: 1993-04-30 00:00:00.0
Actual Return to Compliance Date: 1993-06-15 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 002
Date of Enforcement Action: 1993-04-29 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: INITIAL 3008(A) COMPLIANCE
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: 2200
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - Imports
Date Violation was Determined: 2017-11-14 00:00:00.0
Actual Return to Compliance Date: 2017-11-16 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Enforcement Identifier: 307
Date of Enforcement Action: 2017-11-16 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - General
Date Violation was Determined: 1994-05-04 00:00:00.0
Actual Return to Compliance Date: 1994-08-16 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 003
Date of Enforcement Action: 1994-05-12 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: INITIAL 3008(A) COMPLIANCE
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: 4700
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: TSD IS-Ground-Water Monitoring
Date Violation was Determined: 1988-03-24 00:00:00.0
Actual Return to Compliance Date: 1988-08-21 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: LDR - General
Date Violation was Determined: 1989-08-02 00:00:00.0
Actual Return to Compliance Date: 1991-08-20 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: 1989-10-28 00:00:00.0

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: TSD - Financial Requirements
Date Violation was Determined: 1987-02-23 00:00:00.0
Actual Return to Compliance Date: 1987-03-25 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: EPA
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: TSD - General
Date Violation was Determined: 1988-03-24 00:00:00.0
Actual Return to Compliance Date: 1988-08-21 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 002
Date of Enforcement Action: 1988-08-21 00:00:00.0
Enforcement Responsible Agency: EPA
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: STATE TO EPA ADMINISTRATIVE REFERRAL
Enforcement Responsible Person: R9EPA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: TSD - General
Date Violation was Determined: 1989-08-02 00:00:00.0
Actual Return to Compliance Date: 1990-10-04 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: 1989-10-28 00:00:00.0
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: TSD - General
Date Violation was Determined: 1991-10-10 00:00:00.0
Actual Return to Compliance Date: 1992-01-17 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: EPA
Scheduled Compliance Date: Not reported
Enforcement Identifier: 007
Date of Enforcement Action: 1991-12-06 00:00:00.0
Enforcement Responsible Agency: EPA
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9EPA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Universal Waste - General
Date Violation was Determined: 2017-11-14 00:00:00.0
Actual Return to Compliance Date: 2017-11-16 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Enforcement Identifier:	307
Date of Enforcement Action:	2017-11-16 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: TSD IS-Ground-Water Monitoring
Date Violation was Determined: 1988-03-24 00:00:00.0
Actual Return to Compliance Date: 1988-08-21 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 003
Date of Enforcement Action: 1989-02-09 00:00:00.0
Enforcement Responsible Agency: EPA
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: INITIAL 3008(A) COMPLIANCE
Enforcement Responsible Person: R9EPA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - General
Date Violation was Determined: 1993-04-30 00:00:00.0
Actual Return to Compliance Date: 1993-06-15 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 002
Date of Enforcement Action: 1993-04-29 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: INITIAL 3008(A) COMPLIANCE
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: 2200
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: TSD - General
Date Violation was Determined: 1988-03-24 00:00:00.0
Actual Return to Compliance Date: 1988-08-21 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: TSD - General
Date Violation was Determined: 1991-10-10 00:00:00.0
Actual Return to Compliance Date: 1992-01-17 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: EPA
Scheduled Compliance Date: Not reported
Enforcement Identifier: 007
Date of Enforcement Action: 1991-12-06 00:00:00.0
Enforcement Responsible Agency: EPA
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9EPA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: TSD - General
Date Violation was Determined: 1991-10-10 00:00:00.0
Actual Return to Compliance Date: 1992-01-17 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: EPA
Scheduled Compliance Date: Not reported
Enforcement Identifier: 007
Date of Enforcement Action: 1991-12-06 00:00:00.0
Enforcement Responsible Agency: EPA
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9EPA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: TSD - General
Date Violation was Determined: 1990-10-04 00:00:00.0
Actual Return to Compliance Date: 1990-10-04 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: EPA
Scheduled Compliance Date: 1990-09-09 00:00:00.0

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Enforcement Identifier:	006
Date of Enforcement Action:	1990-08-09 00:00:00.0
Enforcement Responsible Agency:	EPA
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9EPA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: TSD IS-Ground-Water Monitoring
Date Violation was Determined: 1988-03-24 00:00:00.0
Actual Return to Compliance Date: 1988-08-21 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 002
Date of Enforcement Action: 1988-08-21 00:00:00.0
Enforcement Responsible Agency: EPA
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: STATE TO EPA ADMINISTRATIVE REFERRAL
Enforcement Responsible Person: R9EPA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Universal Waste - General
Date Violation was Determined: 2017-11-14 00:00:00.0
Actual Return to Compliance Date: 2017-11-16 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 307
Date of Enforcement Action: 2017-11-16 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: State Statute or Regulation
Date Violation was Determined: 2019-12-03 00:00:00.0
Actual Return to Compliance Date: 2019-12-04 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 309
Date of Enforcement Action: 2019-12-03 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - General
Date Violation was Determined: 1994-05-04 00:00:00.0
Actual Return to Compliance Date: 1994-08-16 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Enforcement Identifier:	003
Date of Enforcement Action:	1994-05-12 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	INITIAL 3008(A) COMPLIANCE
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	4700
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: TSD - General
Date Violation was Determined: 1991-10-10 00:00:00.0
Actual Return to Compliance Date: 1992-01-17 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: EPA
Scheduled Compliance Date: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Enforcement Identifier: 007
Date of Enforcement Action: 1991-12-06 00:00:00.0
Enforcement Responsible Agency: EPA
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9EPA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: State Statute or Regulation
Date Violation was Determined: 2019-12-03 00:00:00.0
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 309
Date of Enforcement Action: 2019-12-03 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: LDR - General
Date Violation was Determined: 1989-08-02 00:00:00.0
Actual Return to Compliance Date: 1991-08-20 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: 1989-10-28 00:00:00.0

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Enforcement Identifier: 005
Date of Enforcement Action: 1989-09-28 00:00:00.0
Enforcement Responsible Agency: EPA
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9EPA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - General
Date Violation was Determined: 1992-11-08 00:00:00.0
Actual Return to Compliance Date: 1993-01-15 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 001
Date of Enforcement Action: 1992-11-08 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: INITIAL 3008(A) COMPLIANCE
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: 9000
Final Monetary Amount: 9000
Paid Amount: Not reported
Final Count: 1
Final Amount: 9000

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - General
Date Violation was Determined: 1992-11-08 00:00:00.0
Actual Return to Compliance Date: 1993-01-15 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 002
Date of Enforcement Action: 1993-04-29 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: INITIAL 3008(A) COMPLIANCE
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: 2200
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - Manifest/Records/Reporting
Date Violation was Determined: 2018-11-26 00:00:00.0
Actual Return to Compliance Date: 2018-12-04 00:00:00.0
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 308
Date of Enforcement Action: 2018-11-26 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: TSD - General
Date Violation was Determined: 1989-08-02 00:00:00.0
Actual Return to Compliance Date: 1990-10-04 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: 1989-10-28 00:00:00.0

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Enforcement Identifier: 005
Date of Enforcement Action: 1989-09-28 00:00:00.0
Enforcement Responsible Agency: EPA
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9EPA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: HW Management System - Definitions
Date Violation was Determined: 2014-11-18 00:00:00.0
Actual Return to Compliance Date: 2014-11-20 00:00:00.0
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 304
Date of Enforcement Action: 2014-11-20 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: HW Management System - Definitions
Date Violation was Determined: 2014-11-18 00:00:00.0
Actual Return to Compliance Date: 2014-11-20 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 304
Date of Enforcement Action: 2014-11-20 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - General
Date Violation was Determined: 1994-05-04 00:00:00.0
Actual Return to Compliance Date: 1994-08-16 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 003
Date of Enforcement Action: 1994-05-12 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: INITIAL 3008(A) COMPLIANCE
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: 4700
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: LDR - General
Date Violation was Determined: 1989-08-02 00:00:00.0
Actual Return to Compliance Date: 1991-08-20 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: 1989-10-28 00:00:00.0

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Enforcement Identifier: 005
Date of Enforcement Action: 1989-09-28 00:00:00.0
Enforcement Responsible Agency: EPA
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9EPA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: Generators - General
Date Violation was Determined: 1991-10-10 00:00:00.0
Actual Return to Compliance Date: 1992-01-17 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: EPA
Scheduled Compliance Date: Not reported
Enforcement Identifier: 007
Date of Enforcement Action: 1991-12-06 00:00:00.0
Enforcement Responsible Agency: EPA
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9EPA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: LDR - General
Date Violation was Determined: 1994-05-04 00:00:00.0
Actual Return to Compliance Date: 1994-08-16 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 003
Date of Enforcement Action: 1994-05-12 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: INITIAL 3008(A) COMPLIANCE
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: 4700
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: State Statute or Regulation
Date Violation was Determined: 2018-11-26 00:00:00.0
Actual Return to Compliance Date: 2018-12-04 00:00:00.0
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Enforcement Identifier:	308
Date of Enforcement Action:	2018-11-26 00:00:00.0
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: TSD - General
Date Violation was Determined: 1991-10-10 00:00:00.0
Actual Return to Compliance Date: 1992-01-17 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: EPA
Scheduled Compliance Date: Not reported
Enforcement Identifier: 007
Date of Enforcement Action: 1991-12-06 00:00:00.0
Enforcement Responsible Agency: EPA
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9EPA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: TSD - General
Date Violation was Determined: 1987-02-23 00:00:00.0
Actual Return to Compliance Date: 1987-03-25 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: EPA
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: TSD - General
Date Violation was Determined: 1988-03-24 00:00:00.0
Actual Return to Compliance Date: 1988-08-21 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Enforcement Identifier:	003
Date of Enforcement Action:	1989-02-09 00:00:00.0
Enforcement Responsible Agency:	EPA
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	INITIAL 3008(A) COMPLIANCE
Enforcement Responsible Person:	R9EPA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	TSD - General
Date Violation was Determined:	1989-01-23 00:00:00.0
Actual Return to Compliance Date:	1990-10-04 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	EPA
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Universal Waste - General
Date Violation was Determined: 2017-11-14 00:00:00.0
Actual Return to Compliance Date: 2017-11-16 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 307
Date of Enforcement Action: 2017-11-16 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: LDR - General
Date Violation was Determined: 1989-08-02 00:00:00.0
Actual Return to Compliance Date: 1991-08-20 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: 1989-10-28 00:00:00.0

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - General
Date Violation was Determined: 1993-04-30 00:00:00.0
Actual Return to Compliance Date: 1993-06-15 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 002
Date of Enforcement Action: 1993-04-29 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: INITIAL 3008(A) COMPLIANCE
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: 2200
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Evaluation Action Summary:
Evaluation Date: 2017-11-14 00:00:00.0
Evaluation Responsible Agency: State
Found Violation: Yes
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier: Not reported
Evaluation Responsible Sub-Organization: Not reported
Actual Return to Compliance Date: 2017-12-15 00:00:00.0

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2005-12-12 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1993-03-30 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1993-06-15 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2017-11-14 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2017-11-16 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1994-04-05 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1994-08-16 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Evaluation Date:	1988-03-24 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1988-08-21 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1989-08-02 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1991-08-20 00:00:00.0
Scheduled Compliance Date:	1989-10-28 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1987-02-23 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1987-03-25 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1988-03-24 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1988-08-21 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2013-12-10 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1989-08-02 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1990-10-04 00:00:00.0
Scheduled Compliance Date:	1989-10-28 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1991-08-20 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1992-01-17 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2017-11-14 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2017-11-16 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2017-11-14 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1988-03-24 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1988-08-21 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2000-06-27 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1993-03-30 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1993-06-15 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1997-02-18 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1988-03-24 00:00:00.0
Evaluation Responsible Agency:	EPA

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1988-08-21 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1991-08-20 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1992-01-17 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2011-04-12 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1987-03-25 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2004-09-14 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1991-08-20 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1992-01-17 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1991-08-20 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1990-10-04 00:00:00.0
Scheduled Compliance Date:	1990-09-09 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1992-01-17 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	No
Evaluation Type Description:	NOT A SIGNIFICANT NON-COMPLIER
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2007-02-07 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Evaluation Date:	1994-04-06 00:00:00.0
Evaluation Responsible Agency:	EPA-Initiated Oversight/Observation/Training Actions
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1995-04-06 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1988-03-24 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1988-08-21 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2008-11-19 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2017-11-14 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2017-11-16 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2016-06-14 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2002-11-20 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1992-02-19 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1998-02-04 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2017-11-14 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2019-12-03 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2019-12-04 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2017-11-14 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1994-04-05 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1994-08-16 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1991-10-10 00:00:00.0
Evaluation Responsible Agency:	EPA

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Found Violation:	No
Evaluation Type Description:	SIGNIFICANT NON-COMPLIER
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2016-12-20 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1991-08-20 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1992-01-17 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2001-11-06 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2019-12-03 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1989-08-02 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1991-08-20 00:00:00.0
Scheduled Compliance Date:	1989-10-28 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2016-12-20 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1992-11-08 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	NON-FINANCIAL RECORD REVIEW
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1993-01-15 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2012-04-02 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Evaluation Date:	1992-11-08 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	NON-FINANCIAL RECORD REVIEW
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1993-01-15 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2018-11-26 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2018-12-04 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1989-08-02 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1990-10-04 00:00:00.0
Scheduled Compliance Date:	1989-10-28 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2014-11-18 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2014-11-20 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2016-12-20 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2001-06-13 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2014-11-18 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2014-11-20 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1994-04-05 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1994-08-16 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2008-03-04 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1996-02-05 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2016-12-20 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2003-11-19 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1995-04-06 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2009-09-30 00:00:00.0
Evaluation Responsible Agency:	State

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1989-08-02 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1991-08-20 00:00:00.0
Scheduled Compliance Date:	1989-10-28 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1991-08-20 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1992-01-17 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1994-04-05 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1994-08-16 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2018-11-26 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2018-12-04 00:00:00.0

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2013-04-16 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2016-12-20 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2017-11-14 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1991-08-20 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1992-01-17 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Evaluation Date:	1987-02-23 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1987-03-25 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1988-03-24 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1988-08-21 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1989-01-23 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1990-10-04 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2017-11-14 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2017-11-16 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1989-08-02 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1991-08-20 00:00:00.0
Scheduled Compliance Date:	1989-10-28 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1993-03-30 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1993-06-15 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1999-02-16 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

RCRA-LQG:

Date Form Received by Agency:	2018-10-19 00:00:00.0
Handler Name:	EDWARDS AIR FORCE BASE
Handler Address:	446 N. ROSAMOND BLVD BLDG 4916
Handler City,State,Zip:	EDWARDS, CA 93524-1130
EPA ID:	CA1570024504
Contact Name:	D MALAMA CHOCK
Contact Address:	NORTH ROSAMOND BLVD, STE A
Contact City,State,Zip:	EDWARDS, CA 93524
Contact Telephone:	661-277-3454
Contact Fax:	661-277-1460
Contact Email:	D_MALAMA.CHOCK@US.AF.MIL
Contact Title:	CHIEF, WATER AND WASTE OPS SECTION
EPA Region:	09
Land Type:	Federal
Federal Waste Generator Description:	Large Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	2017
Accessibility:	Not reported
Active Site Indicator:	Handler Activities, Permitting Activities, Corrective Action Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	NORTH ROSAMOND BLVD, STE A
Mailing City,State,Zip:	EDWARDS, CA 93524
Owner Name:	EDWARDS AIR FORCE BASE
Owner Type:	Federal
Operator Name:	EDWARDS AIR FORCE BASE
Operator Type:	Federal
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	Yes
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	Yes
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Storage, Treatment
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	The land is federally-owned, The site is federally-owned, The site is federally-operated
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Land Disposal, Storage, Treatment
2018 GPRA Permit Baseline:	Accomplished
2018 GPRA Renewals Baseline:	Accomplished
Permit Renewals Workload Universe:	Storage, Treatment
Permit Workload Universe:	Storage, Treatment
Permit Progress Universe:	Land Disposal, Storage, Treatment

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	Yes
Subject to Corrective Action Universe:	Yes
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	Yes
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	Yes
Groundwater Controls Indicator:	Yes
Operating TSDF Universe:	Storage, Treatment
Full Enforcement Universe:	Storage, Treatment
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2018-11-26 18:57:03.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	Not reported

Biennial: List of Years
Year: 2017

Click Here for Biennial Reporting System Data:
Year: 2015

Click Here for Biennial Reporting System Data:
Year: 2013

Click Here for Biennial Reporting System Data:
Year: 2011

Click Here for Biennial Reporting System Data:
Year: 2009

Click Here for Biennial Reporting System Data:
Year: 2007

Click Here for Biennial Reporting System Data:
Year: 2005

Click Here for Biennial Reporting System Data:
Year: 2003

Click Here for Biennial Reporting System Data:
Year: 2001

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Click Here for Biennial Reporting System Data:

Hazardous Waste Summary:

Waste Code:	D001
Waste Description:	IGNITABLE WASTE
Waste Code:	D002
Waste Description:	CORROSIVE WASTE
Waste Code:	D003
Waste Description:	REACTIVE WASTE
Waste Code:	D004
Waste Description:	ARSENIC
Waste Code:	D005
Waste Description:	BARIUM
Waste Code:	D006
Waste Description:	CADMIUM
Waste Code:	D007
Waste Description:	CHROMIUM
Waste Code:	D008
Waste Description:	LEAD
Waste Code:	D009
Waste Description:	MERCURY
Waste Code:	D010
Waste Description:	SELENIUM
Waste Code:	D011
Waste Description:	SILVER
Waste Code:	D012
Waste Description:	ENDRIN (1,2,3,4,10,10-HEXACHLORO-1,7-EPOXY-1,4,4A,5,6,7,8,8A-OCTAHYDRO-1,4-ENDO, ENDO-5,8-DIMETH-ANO-NAPHTHALENE)
Waste Code:	D013
Waste Description:	LINDANE (1,2,3,4,5,6-HEXA-CHLOROCYCLOHEXANE, GAMMA ISOMER)
Waste Code:	D014
Waste Description:	METHOXYCHLOR (1,1,1-TRICHLORO-2,2-BIS [P-METHOXYPHENYL] ETHANE)
Waste Code:	D015
Waste Description:	TOXAPHENE (C10 H10 CL8, TECHNICAL CHLORINATED CAMPHENE, 67-69 PERCENT CHLORINE)
Waste Code:	D016
Waste Description:	2,4-D (2,4-DICHLOROPHENOXYACETIC ACID)
Waste Code:	D017
Waste Description:	2,4,5-TP SILVEX (2,4,5-TRICHLOROPHENOXYPROPIONIC ACID)

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Waste Code: D018
Waste Description: BENZENE

Waste Code: D019
Waste Description: CARBON TETRACHLORIDE

Waste Code: D020
Waste Description: CHLORDANE

Waste Code: D021
Waste Description: CHLOROBENZENE

Waste Code: D022
Waste Description: CHLOROFORM

Waste Code: D023
Waste Description: O-CRESOL

Waste Code: D024
Waste Description: M-CRESOL

Waste Code: D025
Waste Description: P-CRESOL

Waste Code: D026
Waste Description: CRESOL

Waste Code: D027
Waste Description: 1,4-DICHLOROBENZENE

Waste Code: D028
Waste Description: 1,2-DICHLOROETHANE

Waste Code: D029
Waste Description: 1,1-DICHLOROETHYLENE

Waste Code: D030
Waste Description: 2,4-DINITROTOLUENE

Waste Code: D031
Waste Description: HEPTACHLOR (AND ITS EPOXIDE)

Waste Code: D032
Waste Description: HEXACHLOROBENZENE

Waste Code: D033
Waste Description: HEXACHLOROBUTADIENE

Waste Code: D034
Waste Description: HEXACHLOROETHANE

Waste Code: D035
Waste Description: METHYL ETHYL KETONE

Waste Code: D036
Waste Description: NITROBENZENE

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Waste Code: D037
Waste Description: PENTACHLOROPHENOL

Waste Code: D038
Waste Description: PYRIDINE

Waste Code: D039
Waste Description: TETRACHLOROETHYLENE

Waste Code: D040
Waste Description: TRICHLORETHYLENE

Waste Code: D041
Waste Description: 2,4,5-TRICHLOROPHENOL

Waste Code: D042
Waste Description: 2,4,6-TRICHLOROPHENOL

Waste Code: D043
Waste Description: VINYL CHLORIDE

Waste Code: F001
Waste Description: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLORETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste Code: F002
Waste Description: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste Code: F003
Waste Description: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste Code: F004
Waste Description: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: CRESOLS, CRESYLIC ACID, AND NITROBENZENE; AND THE STILL BOTTOMS FROM THE RECOVERY OF THESE

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SOLVENTS; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste Code: F005
Waste Description: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste Code: F006
Waste Description: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS, EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC, AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.

Waste Code: F027
Waste Description: DISCARDED UNUSED FORMULATIONS CONTAINING TRI-, TETRA-, OR PENTACHLOROPHENOL OR DISCARDED UNUSED FORMULATIONS CONTAINING COMPOUNDS DERIVED FROM THESE CHLOROPHENOLS. (THIS LISTING DOES NOT INCLUDE FORMULATIONS CONTAINING HEXACHLOROPHENE SYNTHESIZED FROM PREPURIFIED 2,4,5-TRICHLOROPHENOL AS THE SOLE COMPONENT.)

Waste Code: P001
Waste Description: 2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYLBUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3% (OR) WARFARIN, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3%

Waste Code: P003
Waste Description: 2-PROPENAL (OR) ACROLEIN

Waste Code: P005
Waste Description: 2-PROPEN-1-OL (OR) ALLYL ALCOHOL

Waste Code: P012
Waste Description: ARSENIC OXIDE AS2O3 (OR) ARSENIC TRIOXIDE

Waste Code: P014
Waste Description: BENZENETHIOL (OR) THIOPHENOL

Waste Code: P027
Waste Description: 3-CHLOROPROPIONITRILE (OR) PROPANENITRILE, 3-CHLORO-

Waste Code: P028
Waste Description: BENZENE, (CHLOROMETHYL)- (OR) BENZYL CHLORIDE

Waste Code: P029
Waste Description: COPPER CYANIDE (OR) COPPER CYANIDE CU(CN)

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Waste Code: P030
Waste Description: CYANIDES (SOLUBLE CYANIDE SALTS), NOT OTHERWISE SPECIFIED

Waste Code: P031
Waste Description: CYANOGEN (OR) ETHANEDINITRILE

Waste Code: P033
Waste Description: CYANOGEN CHLORIDE (OR) CYANOGEN CHLORIDE (CN)CL

Waste Code: P037
Waste Description: 2,7:3,6-DIMETHANONAPHTH[2,3-B]OXIRENE, 3,4,5,6,9,9-HEXACHLORO-1A,2,2A,3,6,6A,7,7A-OCTAHYDRO-, (1AALPHA, 2BETA, 2AALPHA, 3BETA, 6BETA, 6AALPHA, 7BETA, 7AALPHA)- (OR) DIELDRIN

Waste Code: P047
Waste Description: 4,6-DINITRO-O-CRESOL, & SALTS (OR) PHENOL, 2-METHYL-4,6-DINITRO-, & SALTS

Waste Code: P048
Waste Description: 2,4-DINITROPHENOL (OR) PHENOL, 2,4-DINITRO-

Waste Code: P050
Waste Description: 6,9-METHANO-2,4,3-BENZODIOXATHIEPIN,6,7,8,9,10,10-HEXACHLORO-1,5,5A,6,9,9A-HEXAHYDRO-,3-OXIDE (OR) ENDOSULFAN

Waste Code: P051
Waste Description: 2,7:3,6-DIMETHANONAPHTH[2,3-B]OXIRENE, 3,4,5,6,9,9-HEXACHLORO-1A,2,2A,3,6,6A,7,7A-OCTAHYDRO-, (1AALPHA, 2BETA, 2ABETA, 3ALPHA, 6ALPHA, 6ABETA, 7BETA, 7AALPHA)- & METABOLITES (OR) ENDRIN (OR) ENDRIN, & METABOLITES

Waste Code: P056
Waste Description: FLUORINE

Waste Code: P059
Waste Description: 4,7-METHANO-1H-INDENE, 1,4,5,6,7,8,8-HEPTACHLORO-3A,4,7,7A-TETRAHYDRO- (OR) HEPTACHLOR

Waste Code: P063
Waste Description: HYDROCYANIC ACID (OR) HYDROGEN CYANIDE

Waste Code: P068
Waste Description: HYDRAZINE, METHYL- (OR) METHYL HYDRAZINE

Waste Code: P073
Waste Description: NICKEL CARBONYL (OR) NICKEL CARBONYL NI(CO)4, (T-4)-

Waste Code: P077
Waste Description: BENZENAMINE, 4-NITRO- (OR) P-NITROANILINE

Waste Code: P078
Waste Description: NITROGEN DIOXIDE (OR) NITROGEN OXIDE NO2

Waste Code: P098
Waste Description: POTASSIUM CYANIDE (OR) POTASSIUM CYANIDE K(CN)

Waste Code: P104

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Waste Description: SILVER CYANIDE (OR) SILVER CYANIDE AG(CN)

Waste Code: P105
Waste Description: SODIUM AZIDE

Waste Code: U001
Waste Description: ACETALDEHYDE (I) (OR) ETHANAL (I)

Waste Code: U002
Waste Description: 2-PROPANONE (I) (OR) ACETONE (I)

Waste Code: U003
Waste Description: ACETONITRILE (I,T)

Waste Code: U004
Waste Description: ACETOPHENONE (OR) ETHANONE, 1-PHENYL-

Waste Code: U007
Waste Description: 2-PROPENAMIDE (OR) ACRYLAMIDE

Waste Code: U008
Waste Description: 2-PROPENOIC ACID (I) (OR) ACRYLIC ACID (I)

Waste Code: U009
Waste Description: 2-PROPENENITRILE (OR) ACRYLONITRILE

Waste Code: U012
Waste Description: ANILINE (I,T) (OR) BENZENAMINE (I,T)

Waste Code: U019
Waste Description: BENZENE (I,T)

Waste Code: U029
Waste Description: METHANE, BROMO- (OR) METHYL BROMIDE

Waste Code: U031
Waste Description: 1-BUTANOL (I) (OR) N-BUTYL ALCOHOL (I)

Waste Code: U034
Waste Description: ACETALDEHYDE, TRICHLORO- (OR) CHLORAL

Waste Code: U037
Waste Description: BENZENE, CHLORO- (OR) CHLOROBENZENE

Waste Code: U041
Waste Description: EPICHLOROHYDRIN (OR) OXIRANE, (CHLOROMETHYL)-

Waste Code: U042
Waste Description: 2-CHLOROETHYL VINYL ETHER (OR) ETHENE, (2-CHLOROETHOXY)-

Waste Code: U044
Waste Description: CHLOROFORM (OR) METHANE, TRICHLORO-

Waste Code: U045
Waste Description: METHANE, CHLORO- (I,T) (OR) METHYL CHLORIDE (I,T)

Waste Code: U048

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Waste Description: O-CHLOROPHENOL (OR) PHENOL, 2-CHLORO-

Waste Code: U053
Waste Description: 2-BUTENAL (OR) CROTONALDEHYDE

Waste Code: U056
Waste Description: BENZENE, HEXAHYDRO- (I) (OR) CYCLOHEXANE (I)

Waste Code: U057
Waste Description: CYCLOHEXANONE (I)

Waste Code: U060
Waste Description: BENZENE, 1,1'-(2,2-DICHLOROETHYLIDENE)BIS[4-CHLORO- (OR) DDD

Waste Code: U061
Waste Description: BENZENE, 1,1'-(2,2,2-TRICHLOROETHYLIDENE)BIS[4-CHLORO- (OR) DDT

Waste Code: U066
Waste Description: 1,2-DIBROMO-3-CHLOROPROPANE (OR) PROPANE, 1,2-DIBROMO-3-CHLORO-

Waste Code: U067
Waste Description: ETHANE, 1,2-DIBROMO- (OR) ETHYLENE DIBROMIDE

Waste Code: U068
Waste Description: METHANE, DIBROMO- (OR) METHYLENE BROMIDE

Waste Code: U069
Waste Description: 1,2-BENZENEDICARBOXYLIC ACID, DIBUTYL ESTER (OR) DIBUTYL PHTHALATE

Waste Code: U070
Waste Description: BENZENE, 1,2-DICHLORO- (OR) O-DICHLOROBENZENE

Waste Code: U071
Waste Description: BENZENE, 1,3-DICHLORO- (OR) M-DICHLOROBENZENE

Waste Code: U072
Waste Description: BENZENE, 1,4-DICHLORO- (OR) P-DICHLOROBENZENE

Waste Code: U074
Waste Description: 1,4-DICHLORO-2-BUTENE (I,T) (OR) 2-BUTENE, 1,4-DICHLORO- (I,T)

Waste Code: U076
Waste Description: ETHANE, 1,1-DICHLORO- (OR) ETHYLIDENE DICHLORIDE

Waste Code: U077
Waste Description: ETHANE, 1,2-DICHLORO- (OR) ETHYLENE DICHLORIDE

Waste Code: U078
Waste Description: 1,1-DICHLOROETHYLENE (OR) ETHENE, 1,1-DICHLORO-

Waste Code: U080
Waste Description: METHANE, DICHLORO- (OR) METHYLENE CHLORIDE

Waste Code: U081
Waste Description: 2,4-DICHLOROPHENOL (OR) PHENOL, 2,4-DICHLORO-

Waste Code: U084

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Waste Description: 1,3-DICHLOROPROPENE (OR) 1-PROPENE, 1,3-DICHLORO-

Waste Code: U085
Waste Description: 1,2:3,4-DIEPOXYBUTANE (I,T) (OR) 2,2'-BIOXIRANE

Waste Code: U098
Waste Description: 1,1-DIMETHYLHYDRAZINE (OR) HYDRAZINE, 1,1-DIMETHYL-

Waste Code: U101
Waste Description: 2,4-DIMETHYLPHENOL (OR) PHENOL, 2,4-DIMETHYL-

Waste Code: U103
Waste Description: DIMETHYL SULFATE (OR) SULFURIC ACID, DIMETHYL ESTER

Waste Code: U108
Waste Description: 1,4-DIETHYLENEOXIDE (OR) 1,4-DIOXANE

Waste Code: U112
Waste Description: ACETIC ACID, ETHYL ESTER (I) (OR) ETHYL ACETATE (I)

Waste Code: U121
Waste Description: METHANE, TRICHLOROFLUORO- (OR) TRICHLOROMONOFLUOROMETHANE

Waste Code: U122
Waste Description: FORMALDEHYDE

Waste Code: U123
Waste Description: FORMIC ACID (C,T)

Waste Code: U128
Waste Description: 1,3-BUTADIENE, 1,1,2,3,4,4-HEXACHLORO- (OR) HEXACHLOROBUTADIENE

Waste Code: U129
Waste Description: CYCLOHEXANE, 1,2,3,4,5,6-HEXACHLORO-, (1ALPHA, 2ALPHA, 3BETA, 4ALPHA, 5ALPHA, 6BETA)- (OR) LINDANE

Waste Code: U131
Waste Description: ETHANE, HEXACHLORO- (OR) HEXACHLOROETHANE

Waste Code: U133
Waste Description: HYDRAZINE (R,T)

Waste Code: U134
Waste Description: HYDROFLUORIC ACID (C,T) (OR) HYDROGEN FLUORIDE (C,T)

Waste Code: U135
Waste Description: HYDROGEN SULFIDE (OR) HYDROGEN SULFIDE H2S

Waste Code: U138
Waste Description: METHANE, IODO- (OR) METHYL IODIDE

Waste Code: U140
Waste Description: 1-PROPANOL, 2-METHYL- (I,T) (OR) ISOBUTYL ALCOHOL (I,T)

Waste Code: U144
Waste Description: ACETIC ACID, LEAD(2+) SALT (OR) LEAD ACETATE

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Waste Code: U147
Waste Description: 2,5-FURANDIONE (OR) MALEIC ANHYDRIDE

Waste Code: U149
Waste Description: MALONONITRILE (OR) PROPANEDINITRILE

Waste Code: U150
Waste Description: L-PHENYLALANINE, 4-[BIS(2-CHLOROETHYL)AMINO]- (OR) MELPHALAN

Waste Code: U151
Waste Description: MERCURY

Waste Code: U152
Waste Description: 2-PROPENENITRILE, 2-METHYL- (I,T) (OR) METHACRYLONITRILE (I,T)

Waste Code: U154
Waste Description: METHANOL (I) (OR) METHYL ALCOHOL (I)

Waste Code: U159
Waste Description: 2-BUTANONE (I,T) (OR) METHYL ETHYL KETONE (MEK) (I,T)

Waste Code: U161
Waste Description: 4-METHYL-2-PENTANONE (I) (OR) METHYL ISOBUTYL KETONE (I) (OR) PENTANOL, 4-METHYL-

Waste Code: U162
Waste Description: 2-PROPENOIC ACID, 2-METHYL-, METHYL ESTER (I,T) (OR) METHYL METHACRYLATE (I,T)

Waste Code: U165
Waste Description: NAPHTHALENE

Waste Code: U169
Waste Description: BENZENE, NITRO- (OR) NITROBENZENE (I,T)

Waste Code: U170
Waste Description: P-NITROPHENOL (I,T) (OR) PHENOL, 4-NITRO-

Waste Code: U171
Waste Description: 2-NITROPROPANE (I,T) (OR) PROPANE, 2-NITRO- (I,T)

Waste Code: U172
Waste Description: 1-BUTANAMINE, N-BUTYL-N-NITROSO- (OR) N-NITROSODI-N-BUTYLAMINE

Waste Code: U182
Waste Description: 1,3,5-TRIOXANE, 2,4,6-TRIMETHYL- (OR) PARALDEHYDE

Waste Code: U184
Waste Description: ETHANE, PENTACHLORO- (OR) PENTACHLOROETHANE

Waste Code: U188
Waste Description: PHENOL

Waste Code: U194
Waste Description: 1-PROPANAMINE (I,T) (OR) N-PROPYLAMINE (I,T)

Waste Code: U196

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Waste Description: PYRIDINE

Waste Code: U208
Waste Description: 1,1,1,2-TETRACHLOROETHANE (OR) ETHANE, 1,1,1,2-TETRACHLORO-

Waste Code: U209
Waste Description: 1,1,2,2-TETRACHLOROETHANE (OR) ETHANE, 1,1,2,2-TETRACHLORO-

Waste Code: U210
Waste Description: ETHENE, TETRACHLORO- (OR) TETRACHLOROETHYLENE

Waste Code: U211
Waste Description: CARBON TETRACHLORIDE (OR) METHANE, TETRACHLORO-

Waste Code: U213
Waste Description: FURAN, TETRAHYDRO-(I) (OR) TETRAHYDROFURAN (I)

Waste Code: U219
Waste Description: THIOUREA

Waste Code: U220
Waste Description: BENZENE, METHYL- (OR) TOLUENE

Waste Code: U221
Waste Description: BENZENEDIAMINE, AR-METHYL- (OR) TOLUENEDIAMINE

Waste Code: U222
Waste Description: BENZENAMINE, 2-METHYL-, HYDROCHLORIDE (OR) O-TOLUIDINE HYDROCHLORIDE

Waste Code: U223
Waste Description: BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T) (OR) TOLUENE DIISOCYANATE (R,T)

Waste Code: U226
Waste Description: ETHANE, 1,1,1-TRICHLORO- (OR) METHYL CHLOROFORM

Waste Code: U227
Waste Description: 1,1,2-TRICHLOROETHANE (OR) ETHANE, 1,1,2-TRICHLORO-

Waste Code: U228
Waste Description: ETHENE, TRICHLORO- (OR) TRICHLOROETHYLENE

Waste Code: U239
Waste Description: BENZENE, DIMETHYL- (I,T) (OR) XYLENE (I)

Waste Code: U359
Waste Description: ETHANOL, 2-ETHOXY- (OR) ETHYLENE GLYCOL MONOETHYL ETHER

Handler - Owner Operator:
Owner/Operator Indicator: Operator
Owner/Operator Name: USAF
Legal Status: Federal
Date Became Current: 1994-11-28 00:00:00.
Date Ended Current: Not reported
Owner/Operator Address: Not reported
Owner/Operator City,State,Zip: Not reported
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	EDWARDS AIR FORCE BASE
Legal Status:	Federal
Date Became Current:	1950-01-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	446 N. ROSAMOND BLVD BLDG 4916
Owner/Operator City,State,Zip:	EDWARDS, CA 93524-1130
Owner/Operator Telephone:	661-277-3454
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	661-277-1460
Owner/Operator Email:	D_MALAMA.CHOCK@US.AF.MIL
Owner/Operator Indicator:	Operator
Owner/Operator Name:	MULTIPLE OPS - ALL USAF COMMANDS
Legal Status:	Federal
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	AFFTC EDWARDS AFB
Owner/Operator City,State,Zip:	CITY NOT REPORTED, CA 99999
Owner/Operator Telephone:	805-277-3010
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	USAF
Legal Status:	Federal
Date Became Current:	1951-09-25 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	5 EAST POPSON AVE
Owner/Operator City,State,Zip:	EDWARDS AFB, CA 93524
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	EDWARDS AIR FORCE BASE
Legal Status:	Federal
Date Became Current:	1950-01-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	120 N. ROSAMOND BLVD.
Owner/Operator City,State,Zip:	EDWARD, CA 93524
Owner/Operator Telephone:	661-277-1401
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	UNITED STATES AIR FORCE
Legal Status:	Federal
Date Became Current:	1950-01-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	12 LABOBORATORY ROAD BLDG 4231

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Owner/Operator City,State,Zip:	EDWARDS, CA 93524
Owner/Operator Telephone:	661-277-9252
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	UNITED STATES AIR FORCE
Legal Status:	Federal
Date Became Current:	1951-09-25 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	5 EAST POPSON AVENUE BUILDING 2
Owner/Operator City,State,Zip:	EDWARDS AFB, CA 93524-8060
Owner/Operator Telephone:	661-277-1478
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	UNITED STATES AIR FORCE
Legal Status:	Federal
Date Became Current:	1951-09-25 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	EDWARDS AFB
Legal Status:	Federal
Date Became Current:	1950-01-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	UNITED STATES AIR FORCE
Legal Status:	Federal
Date Became Current:	1950-01-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	12 LABOBORATORY ROAD BLDG 4231
Owner/Operator City,State,Zip:	EDWARDS, CA 93524
Owner/Operator Telephone:	661-277-9252
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	UNITED STATES AIR FORCE
Legal Status:	Federal

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Date Became Current:	1951-09-25 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	5 EAST POPSON AVENUE
Owner/Operator City,State,Zip:	EDWARDS AFB, CA 93524
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	EDWARDS AIR FORCE BASE
Legal Status:	Federal
Date Became Current:	1950-01-01 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	120 NORTH ROSAMOND BLVD, STE A
Owner/Operator City,State,Zip:	EDWARDS, CA 93524
Owner/Operator Telephone:	661-277-3454
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	661-277-1460
Owner/Operator Email:	D_MALAMA.CHOCK@US.AF.MIL
Owner/Operator Indicator:	Owner
Owner/Operator Name:	USAF
Legal Status:	Federal
Date Became Current:	1951-09-25 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	SAME AS IN ITEM 4
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Owner
Owner/Operator Name:	UNITED STATES AIR FORCE
Legal Status:	Federal
Date Became Current:	1951-09-25 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	5 EAST POPSON AVE, BLDG 2650
Owner/Operator City,State,Zip:	EDWARDS AFB, CA 93524
Owner/Operator Telephone:	661-277-1401
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported
Owner/Operator Indicator:	Operator
Owner/Operator Name:	UNITED STATES AIR FORCE
Legal Status:	Federal
Date Became Current:	1994-11-28 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Owner/Operator Indicator:	Operator
Owner/Operator Name:	USAF
Legal Status:	Federal
Date Became Current:	1994-11-28 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	MULTIPLE OPS - ALL USAF COMMANDS
Legal Status:	Federal
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	AFFTC EDWARDS AFB
Owner/Operator City,State,Zip:	EDWARDS AFB, CA 93524-1130
Owner/Operator Telephone:	805-277-3010
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	UNITED STATES AIR FORCE
Legal Status:	Federal
Date Became Current:	1994-11-28 00:00:00.
Date Ended Current:	Not reported
Owner/Operator Address:	Not reported
Owner/Operator City,State,Zip:	Not reported
Owner/Operator Telephone:	Not reported
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	2010-07-13 00:00:00.0
Handler Name:	EDWARDS AIR FORCE BASE
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	Yes
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	2012-09-11 00:00:00.0
Handler Name:	EDWARDS AIR FORCE BASE
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	Yes
Recognized Trader Importer:	No
Recognized Trader Exporter:	No

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	2016-02-29 00:00:00.0
Handler Name:	EDWARDS AIR FORCE BASE
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	Yes
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	2014-03-01 00:00:00.0
Handler Name:	EDWARDS AIR FORCE BASE
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	2018-10-19 00:00:00.0
Handler Name:	EDWARDS AIR FORCE BASE
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	Yes
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	No
Electronic Manifest Broker:	No

Receive Date:	1996-09-01 00:00:00.0
Handler Name:	USAF EDWARDS AFB
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Receive Date:	1980-08-18 00:00:00.0
Handler Name:	USAF EDWARDS AFB
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	1980-08-18 00:00:00.0
Handler Name:	USAF EDWARDS AFB
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	1998-02-02 00:00:00.0
Handler Name:	USAF EDWARDS AFB
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	1990-04-27 00:00:00.0
Handler Name:	EDWARDS AFB/ EXPLOSIVE ORDINACE
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	1992-04-25 00:00:00.0
Handler Name:	EDWARDS AIR FORCE BASE
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	1994-03-29 00:00:00.0
Handler Name:	USAF FLIGHT TEST CTR EDWARDS AFB
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	1996-03-27 00:00:00.0
Handler Name:	USAF EDWARDS
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	1999-03-04 00:00:00.0
Handler Name:	EDWARDS AIR FORCE BASE
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

Receive Date:	2000-10-12 00:00:00.0
Handler Name:	EDWARDS AIR FORCE BASE
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported
Receive Date:	2002-03-29 00:00:00.0
Handler Name:	EDWARDS AIRFORCE BASE
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported
Receive Date:	2004-02-26 00:00:00.0
Handler Name:	EDWARDS AIR FORCE BASE
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	Yes
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported
Receive Date:	2006-02-15 00:00:00.0
Handler Name:	EDWARDS AIR FORCE BASE
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	Yes
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported
Receive Date:	2008-02-29 00:00:00.0
Handler Name:	EDWARDS AIR FORCE BASE
Federal Waste Generator Description:	Large Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	Yes
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	No
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 92119

EDWARDS AIR FORCE BASE (Continued) **1000155217**

NAICS Description: OTHER GENERAL GOVERNMENT SUPPORT

NAICS Code: 92711
NAICS Description: SPACE RESEARCH AND TECHNOLOGY

NAICS Code: 92811
NAICS Description: NATIONAL SECURITY

NAICS Code: 928110
NAICS Description: NATIONAL SECURITY

Facility Has Received Notices of Violation:
Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD IS-General
Date Violation was Determined: 2017-11-14 00:00:00.0
Actual Return to Compliance Date: 2017-12-15 00:00:00.0
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 307
Date of Enforcement Action: 2017-11-16 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - General
Date Violation was Determined: 1993-04-30 00:00:00.0
Actual Return to Compliance Date: 1993-06-15 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 002
Date of Enforcement Action: 1993-04-29 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: INITIAL 3008(A) COMPLIANCE
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: 2200
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - Imports
Date Violation was Determined: 2017-11-14 00:00:00.0
Actual Return to Compliance Date: 2017-11-16 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 307
Date of Enforcement Action: 2017-11-16 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - General
Date Violation was Determined: 1994-05-04 00:00:00.0
Actual Return to Compliance Date: 1994-08-16 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Scheduled Compliance Date: Not reported
Enforcement Identifier: 003
Date of Enforcement Action: 1994-05-12 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: INITIAL 3008(A) COMPLIANCE
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: 4700
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: TSD IS-Ground-Water Monitoring
Date Violation was Determined: 1988-03-24 00:00:00.0
Actual Return to Compliance Date: 1988-08-21 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: LDR - General
Date Violation was Determined: 1989-08-02 00:00:00.0
Actual Return to Compliance Date: 1991-08-20 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: 1989-10-28 00:00:00.0
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: TSD - Financial Requirements
Date Violation was Determined: 1987-02-23 00:00:00.0
Actual Return to Compliance Date: 1987-03-25 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: EPA

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: TSD - General
Date Violation was Determined: 1988-03-24 00:00:00.0
Actual Return to Compliance Date: 1988-08-21 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 002
Date of Enforcement Action: 1988-08-21 00:00:00.0
Enforcement Responsible Agency: EPA
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: STATE TO EPA ADMINISTRATIVE REFERRAL
Enforcement Responsible Person: R9EPA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: TSD - General
Date Violation was Determined: 1989-08-02 00:00:00.0
Actual Return to Compliance Date: 1990-10-04 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Scheduled Compliance Date: 1989-10-28 00:00:00.0
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: TSD - General
Date Violation was Determined: 1991-10-10 00:00:00.0
Actual Return to Compliance Date: 1992-01-17 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: EPA
Scheduled Compliance Date: Not reported
Enforcement Identifier: 007
Date of Enforcement Action: 1991-12-06 00:00:00.0
Enforcement Responsible Agency: EPA
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9EPA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Universal Waste - General
Date Violation was Determined: 2017-11-14 00:00:00.0
Actual Return to Compliance Date: 2017-11-16 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 307
Date of Enforcement Action: 2017-11-16 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: TSD IS-Ground-Water Monitoring
Date Violation was Determined: 1988-03-24 00:00:00.0
Actual Return to Compliance Date: 1988-08-21 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 003
Date of Enforcement Action: 1989-02-09 00:00:00.0
Enforcement Responsible Agency: EPA
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: INITIAL 3008(A) COMPLIANCE
Enforcement Responsible Person: R9EPA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - General
Date Violation was Determined: 1993-04-30 00:00:00.0
Actual Return to Compliance Date: 1993-06-15 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Scheduled Compliance Date: Not reported
Enforcement Identifier: 002
Date of Enforcement Action: 1993-04-29 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: INITIAL 3008(A) COMPLIANCE
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: 2200
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: TSD - General
Date Violation was Determined: 1988-03-24 00:00:00.0
Actual Return to Compliance Date: 1988-08-21 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: TSD - General
Date Violation was Determined: 1991-10-10 00:00:00.0
Actual Return to Compliance Date: 1992-01-17 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: EPA

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Scheduled Compliance Date: Not reported
Enforcement Identifier: 007
Date of Enforcement Action: 1991-12-06 00:00:00.0
Enforcement Responsible Agency: EPA
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9EPA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: TSD - General
Date Violation was Determined: 1991-10-10 00:00:00.0
Actual Return to Compliance Date: 1992-01-17 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: EPA
Scheduled Compliance Date: Not reported
Enforcement Identifier: 007
Date of Enforcement Action: 1991-12-06 00:00:00.0
Enforcement Responsible Agency: EPA
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9EPA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	TSD - General
Date Violation was Determined:	1990-10-04 00:00:00.0
Actual Return to Compliance Date:	1990-10-04 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	EPA
Scheduled Compliance Date:	1990-09-09 00:00:00.0
Enforcement Identifier:	006
Date of Enforcement Action:	1990-08-09 00:00:00.0
Enforcement Responsible Agency:	EPA
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9EPA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: TSD IS-Ground-Water Monitoring
Date Violation was Determined: 1988-03-24 00:00:00.0
Actual Return to Compliance Date: 1988-08-21 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 002
Date of Enforcement Action: 1988-08-21 00:00:00.0
Enforcement Responsible Agency: EPA
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: STATE TO EPA ADMINISTRATIVE REFERRAL
Enforcement Responsible Person: R9EPA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Universal Waste - General
Date Violation was Determined: 2017-11-14 00:00:00.0
Actual Return to Compliance Date: 2017-11-16 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Scheduled Compliance Date: Not reported
Enforcement Identifier: 307
Date of Enforcement Action: 2017-11-16 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: State Statute or Regulation
Date Violation was Determined: 2019-12-03 00:00:00.0
Actual Return to Compliance Date: 2019-12-04 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Scheduled Compliance Date: Not reported
Enforcement Identifier: 309
Date of Enforcement Action: 2019-12-03 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - General
Date Violation was Determined: 1994-05-04 00:00:00.0
Actual Return to Compliance Date: 1994-08-16 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 003
Date of Enforcement Action: 1994-05-12 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: INITIAL 3008(A) COMPLIANCE
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: 4700
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: TSD - General
Date Violation was Determined: 1991-10-10 00:00:00.0
Actual Return to Compliance Date: 1992-01-17 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: EPA
Scheduled Compliance Date: Not reported
Enforcement Identifier: 007
Date of Enforcement Action: 1991-12-06 00:00:00.0
Enforcement Responsible Agency: EPA
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9EPA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: State Statute or Regulation
Date Violation was Determined: 2019-12-03 00:00:00.0
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 309
Date of Enforcement Action: 2019-12-03 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	LDR - General
Date Violation was Determined:	1989-08-02 00:00:00.0
Actual Return to Compliance Date:	1991-08-20 00:00:00.0
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	1989-10-28 00:00:00.0
Enforcement Identifier:	005
Date of Enforcement Action:	1989-09-28 00:00:00.0
Enforcement Responsible Agency:	EPA
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9EPA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - General
Date Violation was Determined: 1992-11-08 00:00:00.0
Actual Return to Compliance Date: 1993-01-15 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 001
Date of Enforcement Action: 1992-11-08 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: INITIAL 3008(A) COMPLIANCE
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: 9000
Final Monetary Amount: 9000
Paid Amount: Not reported
Final Count: 1
Final Amount: 9000

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - General
Date Violation was Determined: 1992-11-08 00:00:00.0
Actual Return to Compliance Date: 1993-01-15 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Scheduled Compliance Date: Not reported
Enforcement Identifier: 002
Date of Enforcement Action: 1993-04-29 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: INITIAL 3008(A) COMPLIANCE
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: 2200
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - Manifest/Records/Reporting
Date Violation was Determined: 2018-11-26 00:00:00.0
Actual Return to Compliance Date: 2018-12-04 00:00:00.0
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 308
Date of Enforcement Action: 2018-11-26 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: TSD - General
Date Violation was Determined: 1989-08-02 00:00:00.0
Actual Return to Compliance Date: 1990-10-04 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: 1989-10-28 00:00:00.0
Enforcement Identifier: 005
Date of Enforcement Action: 1989-09-28 00:00:00.0
Enforcement Responsible Agency: EPA
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9EPA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: HW Management System - Definitions
Date Violation was Determined: 2014-11-18 00:00:00.0
Actual Return to Compliance Date: 2014-11-20 00:00:00.0
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Scheduled Compliance Date: Not reported
Enforcement Identifier: 304
Date of Enforcement Action: 2014-11-20 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: HW Management System - Definitions
Date Violation was Determined: 2014-11-18 00:00:00.0
Actual Return to Compliance Date: 2014-11-20 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Scheduled Compliance Date: Not reported
Enforcement Identifier: 304
Date of Enforcement Action: 2014-11-20 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - General
Date Violation was Determined: 1994-05-04 00:00:00.0
Actual Return to Compliance Date: 1994-08-16 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 003
Date of Enforcement Action: 1994-05-12 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: INITIAL 3008(A) COMPLIANCE
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: 4700
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: LDR - General
Date Violation was Determined: 1989-08-02 00:00:00.0
Actual Return to Compliance Date: 1991-08-20 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: 1989-10-28 00:00:00.0
Enforcement Identifier: 005
Date of Enforcement Action: 1989-09-28 00:00:00.0
Enforcement Responsible Agency: EPA
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9EPA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: Generators - General
Date Violation was Determined: 1991-10-10 00:00:00.0
Actual Return to Compliance Date: 1992-01-17 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: EPA

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Scheduled Compliance Date: Not reported
Enforcement Identifier: 007
Date of Enforcement Action: 1991-12-06 00:00:00.0
Enforcement Responsible Agency: EPA
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9EPA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: LDR - General
Date Violation was Determined: 1994-05-04 00:00:00.0
Actual Return to Compliance Date: 1994-08-16 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 003
Date of Enforcement Action: 1994-05-12 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: INITIAL 3008(A) COMPLIANCE
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: 4700
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: State Statute or Regulation
Date Violation was Determined: 2018-11-26 00:00:00.0
Actual Return to Compliance Date: 2018-12-04 00:00:00.0
Return to Compliance Qualifier: Documented
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 308
Date of Enforcement Action: 2018-11-26 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: TSD - General
Date Violation was Determined: 1991-10-10 00:00:00.0
Actual Return to Compliance Date: 1992-01-17 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: EPA

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Scheduled Compliance Date: Not reported
Enforcement Identifier: 007
Date of Enforcement Action: 1991-12-06 00:00:00.0
Enforcement Responsible Agency: EPA
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: WRITTEN INFORMAL
Enforcement Responsible Person: R9EPA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: TSD - General
Date Violation was Determined: 1987-02-23 00:00:00.0
Actual Return to Compliance Date: 1987-03-25 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: EPA
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: TSD - General
Date Violation was Determined: 1988-03-24 00:00:00.0
Actual Return to Compliance Date: 1988-08-21 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 003
Date of Enforcement Action: 1989-02-09 00:00:00.0
Enforcement Responsible Agency: EPA
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: INITIAL 3008(A) COMPLIANCE
Enforcement Responsible Person: R9EPA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: TSD - General
Date Violation was Determined: 1989-01-23 00:00:00.0
Actual Return to Compliance Date: 1990-10-04 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: EPA

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Universal Waste - General
Date Violation was Determined: 2017-11-14 00:00:00.0
Actual Return to Compliance Date: 2017-11-16 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: 307
Date of Enforcement Action: 2017-11-16 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: EPA
Violation Short Description: LDR - General
Date Violation was Determined: 1989-08-02 00:00:00.0
Actual Return to Compliance Date: 1991-08-20 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: 1989-10-28 00:00:00.0
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: TSD - General
Date Violation was Determined: 1993-04-30 00:00:00.0
Actual Return to Compliance Date: 1993-06-15 00:00:00.0
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Scheduled Compliance Date: Not reported
Enforcement Identifier: 002
Date of Enforcement Action: 1993-04-29 00:00:00.0
Enforcement Responsible Agency: State
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: No
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: INITIAL 3008(A) COMPLIANCE
Enforcement Responsible Person: R9STA
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: 2200
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported

Evaluation Action Summary:

Evaluation Date:	2017-11-14 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2017-12-15 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2005-12-12 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1993-03-30 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1993-06-15 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2017-11-14 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2017-11-16 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1994-04-05 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1994-08-16 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1988-03-24 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1988-08-21 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1989-08-02 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1991-08-20 00:00:00.0
Scheduled Compliance Date:	1989-10-28 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1987-02-23 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1987-03-25 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Request Agency: Not reported
Former Citation: Not reported

Evaluation Date: 1988-03-24 00:00:00.0
Evaluation Responsible Agency: EPA
Found Violation: Yes
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier: R9EPA
Evaluation Responsible Sub-Organization: Not reported
Actual Return to Compliance Date: 1988-08-21 00:00:00.0
Scheduled Compliance Date: Not reported
Date of Request: Not reported
Date Response Received: Not reported
Request Agency: Not reported
Former Citation: Not reported

Evaluation Date: 2013-12-10 00:00:00.0
Evaluation Responsible Agency: State
Found Violation: No
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier: Not reported
Evaluation Responsible Sub-Organization: Not reported
Actual Return to Compliance Date: Not reported
Scheduled Compliance Date: Not reported
Date of Request: Not reported
Date Response Received: Not reported
Request Agency: Not reported
Former Citation: Not reported

Evaluation Date: 1989-08-02 00:00:00.0
Evaluation Responsible Agency: EPA
Found Violation: Yes
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier: R9EPA
Evaluation Responsible Sub-Organization: Not reported
Actual Return to Compliance Date: 1990-10-04 00:00:00.0
Scheduled Compliance Date: 1989-10-28 00:00:00.0
Date of Request: Not reported
Date Response Received: Not reported
Request Agency: Not reported
Former Citation: Not reported

Evaluation Date: 1991-08-20 00:00:00.0
Evaluation Responsible Agency: EPA
Found Violation: Yes
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier: R9EPA
Evaluation Responsible Sub-Organization: Not reported
Actual Return to Compliance Date: 1992-01-17 00:00:00.0
Scheduled Compliance Date: Not reported
Date of Request: Not reported
Date Response Received: Not reported
Request Agency: Not reported
Former Citation: Not reported

Evaluation Date: 2017-11-14 00:00:00.0
Evaluation Responsible Agency: State

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2017-11-16 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2017-11-14 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1988-03-24 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1988-08-21 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2000-06-27 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1993-03-30 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1993-06-15 00:00:00.0

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1997-02-18 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1988-03-24 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1988-08-21 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1991-08-20 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1992-01-17 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2011-04-12 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Evaluation Date:	1987-03-25 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2004-09-14 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1991-08-20 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1992-01-17 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1991-08-20 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1990-10-04 00:00:00.0
Scheduled Compliance Date:	1990-09-09 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1992-01-17 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	No
Evaluation Type Description:	NOT A SIGNIFICANT NON-COMPLIER
Evaluation Responsible Person Identifier:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2007-02-07 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1994-04-06 00:00:00.0
Evaluation Responsible Agency:	EPA-Initiated Oversight/Observation/Training Actions
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1995-04-06 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1988-03-24 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1988-08-21 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2008-11-19 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2017-11-14 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2017-11-16 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2016-06-14 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2002-11-20 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1992-02-19 00:00:00.0
Evaluation Responsible Agency:	State

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1998-02-04 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2017-11-14 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2019-12-03 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2019-12-04 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2017-11-14 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1994-04-05 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1994-08-16 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1991-10-10 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	No
Evaluation Type Description:	SIGNIFICANT NON-COMPLIER
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2016-12-20 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1991-08-20 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1992-01-17 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Evaluation Date:	2001-11-06 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2019-12-03 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1989-08-02 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1991-08-20 00:00:00.0
Scheduled Compliance Date:	1989-10-28 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2016-12-20 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1992-11-08 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	NON-FINANCIAL RECORD REVIEW
Evaluation Responsible Person Identifier:	R9STA

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1993-01-15 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2012-04-02 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1992-11-08 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	NON-FINANCIAL RECORD REVIEW
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1993-01-15 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2018-11-26 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2018-12-04 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1989-08-02 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1990-10-04 00:00:00.0
Scheduled Compliance Date:	1989-10-28 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2014-11-18 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2014-11-20 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2016-12-20 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2001-06-13 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2014-11-18 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2014-11-20 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1994-04-05 00:00:00.0
Evaluation Responsible Agency:	State

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1994-08-16 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2008-03-04 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	1996-02-05 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2016-12-20 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2003-11-19 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1995-04-06 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2009-09-30 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1989-08-02 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1991-08-20 00:00:00.0
Scheduled Compliance Date:	1989-10-28 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1991-08-20 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1992-01-17 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Evaluation Date:	1994-04-05 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1994-08-16 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2018-11-26 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2018-12-04 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2013-04-16 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2016-12-20 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

Evaluation Date:	2017-11-14 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1991-08-20 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1992-01-17 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1987-02-23 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1987-03-25 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1988-03-24 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1988-08-21 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1989-01-23 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1990-10-04 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	2017-11-14 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	2017-11-16 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1989-08-02 00:00:00.0
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1991-08-20 00:00:00.0
Scheduled Compliance Date:	1989-10-28 00:00:00.0
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1993-03-30 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	1993-06-15 00:00:00.0
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	1999-02-16 00:00:00.0
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

SIte:

Name:	EDWARDS AIR FORCE BASE
Address:	AFFTC EDWARDS AFB
Address 2:	5 EAST POPSON AVE, BLDG 2650A
City,State,Zip:	EDWARDS AFB, CA 93524
Event Code:	Not reported
Action Taken Date:	06/28/2013
EPA ID:	CA1570024504
Site ID:	0902725
Action Name:	FF ESD
Action ID:	1
Operable Unit:	11
Action Completion Date:	10/30/2013
Contaminated Media:	Debris
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported

Media:

EPA ID:	CA1570024504
Contaminated Media:	Soil
Site ID:	0902725
Action ID:	3
Action Completion Date:	09/30/2007
Operable Unit:	04
Action Name:	FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date:	09/24/2007
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported

EPA ID:	CA1570024504
Contaminated Media:	Debris
Site ID:	0902725
Action ID:	12
Action Completion Date:	09/30/2008
Operable Unit:	11
Action Name:	FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date:	08/04/2008
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported

EPA ID:	CA1570024504
Contaminated Media:	Groundwater
Site ID:	0902725
Action ID:	1
Action Completion Date:	09/30/2009
Operable Unit:	02
Action Name:	FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date:	06/24/2009
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

EPA ID:	CA1570024504
Contaminated Media:	Solid Waste
Site ID:	0902725
Action ID:	1
Action Completion Date:	09/30/2009
Operable Unit:	02
Action Name:	FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date:	06/24/2009
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported

EPA ID:	CA1570024504
Contaminated Media:	Groundwater
Site ID:	0902725
Action ID:	1
Action Completion Date:	09/30/2009
Operable Unit:	02
Action Name:	FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date:	06/24/2009
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported

EPA ID:	CA1570024504
Contaminated Media:	Groundwater
Site ID:	0902725
Action ID:	3
Action Completion Date:	09/30/2007
Operable Unit:	04
Action Name:	FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date:	09/24/2007
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported

EPA ID:	CA1570024504
Contaminated Media:	Debris
Site ID:	0902725
Action ID:	12
Action Completion Date:	09/30/2008
Operable Unit:	11
Action Name:	FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date:	08/04/2008
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported

EPA ID:	CA1570024504
Contaminated Media:	Debris
Site ID:	0902725
Action ID:	1
Action Completion Date:	10/30/2013

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Operable Unit:	11
Action Name:	FF ESD
Action Taken Date:	06/28/2013
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported

EPA ID:	CA1570024504
Contaminated Media:	Groundwater
Site ID:	0902725
Action ID:	4
Action Completion Date:	09/30/2006
Operable Unit:	06
Action Name:	FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date:	09/28/2006
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported

EPA ID:	CA1570024504
Contaminated Media:	Debris
Site ID:	0902725
Action ID:	15
Action Completion Date:	09/30/2012
Operable Unit:	13
Action Name:	FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date:	09/21/2012
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported

EPA ID:	CA1570024504
Contaminated Media:	Solid Waste
Site ID:	0902725
Action ID:	15
Action Completion Date:	09/30/2012
Operable Unit:	13
Action Name:	FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date:	09/21/2012
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported

EPA ID:	CA1570024504
Contaminated Media:	Groundwater
Site ID:	0902725
Action ID:	15
Action Completion Date:	09/30/2012
Operable Unit:	13
Action Name:	FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date:	09/21/2012
Event Code:	Not reported
Contact Name:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Contact Telephone: Not reported
Event: Not reported

EPA ID: CA1570024504
Contaminated Media: Solid Waste
Site ID: 0902725
Action ID: 5
Action Completion Date: 09/30/2009
Operable Unit: 15
Action Name: FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date: 09/16/2009
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EPA ID: CA1570024504
Contaminated Media: Groundwater
Site ID: 0902725
Action ID: 1
Action Completion Date: 09/30/2009
Operable Unit: 02
Action Name: FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date: 06/24/2009
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EPA ID: CA1570024504
Contaminated Media: Soil
Site ID: 0902725
Action ID: 12
Action Completion Date: 09/30/2008
Operable Unit: 11
Action Name: FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date: 08/04/2008
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EPA ID: CA1570024504
Contaminated Media: Soil
Site ID: 0902725
Action ID: 1
Action Completion Date: 09/30/2012
Operable Unit: 02
Action Name: FF ROD Amendment
Action Taken Date: 09/27/2012
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EPA ID: CA1570024504
Contaminated Media: Solid Waste

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Site ID: 0902725
Action ID: 1
Action Completion Date: 09/30/2009
Operable Unit: 02
Action Name: FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date: 06/24/2009
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EPA ID: CA1570024504
Contaminated Media: Groundwater
Site ID: 0902725
Action ID: 1
Action Completion Date: 09/30/2009
Operable Unit: 02
Action Name: FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date: 06/24/2009
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EPA ID: CA1570024504
Contaminated Media: Debris
Site ID: 0902725
Action ID: 1
Action Completion Date: 09/30/2009
Operable Unit: 02
Action Name: FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date: 06/24/2009
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EPA ID: CA1570024504
Contaminated Media: Debris
Site ID: 0902725
Action ID: 12
Action Completion Date: 09/30/2008
Operable Unit: 11
Action Name: FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date: 08/04/2008
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EPA ID: CA1570024504
Contaminated Media: Solid Waste
Site ID: 0902725
Action ID: 1
Action Completion Date: 09/30/2012
Operable Unit: 02
Action Name: FF ROD Amendment

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Action Taken Date: 09/27/2012
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EPA ID: CA1570024504
Contaminated Media: Soil
Site ID: 0902725
Action ID: 1
Action Completion Date: 10/30/2013
Operable Unit: 11
Action Name: FF ESD
Action Taken Date: 06/28/2013
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EPA ID: CA1570024504
Contaminated Media: Soil
Site ID: 0902725
Action ID: 1
Action Completion Date: 09/30/2012
Operable Unit: 02
Action Name: FF ROD Amendment
Action Taken Date: 09/27/2012
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EPA ID: CA1570024504
Contaminated Media: Free-phase NAPL
Site ID: 0902725
Action ID: 1
Action Completion Date: 09/30/2009
Operable Unit: 02
Action Name: FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date: 06/24/2009
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EPA ID: CA1570024504
Contaminated Media: Groundwater
Site ID: 0902725
Action ID: 1
Action Completion Date: 09/30/2009
Operable Unit: 02
Action Name: FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date: 06/24/2009
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

EPA ID: CA1570024504
Contaminated Media: Soil
Site ID: 0902725
Action ID: 12
Action Completion Date: 09/30/2008
Operable Unit: 11
Action Name: FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date: 08/04/2008
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EPA ID: CA1570024504
Contaminated Media: Soil
Site ID: 0902725
Action ID: 12
Action Completion Date: 09/30/2008
Operable Unit: 11
Action Name: FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date: 08/04/2008
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EPA ID: CA1570024504
Contaminated Media: Solid Waste
Site ID: 0902725
Action ID: 15
Action Completion Date: 09/30/2012
Operable Unit: 13
Action Name: FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date: 09/21/2012
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EPA ID: CA1570024504
Contaminated Media: Debris
Site ID: 0902725
Action ID: 15
Action Completion Date: 09/30/2012
Operable Unit: 13
Action Name: FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date: 09/21/2012
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EPA ID: CA1570024504
Contaminated Media: Solid Waste
Site ID: 0902725
Action ID: 1
Action Completion Date: 09/30/2009

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Operable Unit: 02
Action Name: FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date: 06/24/2009
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EPA ID: CA1570024504
Contaminated Media: Solid Waste
Site ID: 0902725
Action ID: 15
Action Completion Date: 09/30/2012
Operable Unit: 13
Action Name: FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date: 09/21/2012
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EPA ID: CA1570024504
Contaminated Media: Solid Waste
Site ID: 0902725
Action ID: 5
Action Completion Date: 09/30/2009
Operable Unit: 15
Action Name: FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date: 09/16/2009
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EPA ID: CA1570024504
Contaminated Media: Debris
Site ID: 0902725
Action ID: 1
Action Completion Date: 10/30/2013
Operable Unit: 11
Action Name: FF ESD
Action Taken Date: 06/28/2013
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EPA ID: CA1570024504
Contaminated Media: Solid Waste
Site ID: 0902725
Action ID: 1
Action Completion Date: 09/30/2012
Operable Unit: 02
Action Name: FF ROD Amendment
Action Taken Date: 09/27/2012
Event Code: Not reported
Contact Name: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Contact Telephone: Not reported
Event: Not reported

EPA ID: CA1570024504
Contaminated Media: Soil
Site ID: 0902725
Action ID: 1
Action Completion Date: 09/30/2009
Operable Unit: 02
Action Name: FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date: 06/24/2009
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EPA ID: CA1570024504
Contaminated Media: Free-phase NAPL
Site ID: 0902725
Action ID: 1
Action Completion Date: 09/30/2009
Operable Unit: 02
Action Name: FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date: 06/24/2009
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EPA ID: CA1570024504
Contaminated Media: Debris
Site ID: 0902725
Action ID: 1
Action Completion Date: 09/30/2009
Operable Unit: 02
Action Name: FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date: 06/24/2009
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EPA ID: CA1570024504
Contaminated Media: Groundwater
Site ID: 0902725
Action ID: 2
Action Completion Date: 09/30/2003
Operable Unit: 03
Action Name: FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date: 09/30/2003
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EPA ID: CA1570024504
Contaminated Media: Debris

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Site ID: 0902725
Action ID: 15
Action Completion Date: 09/30/2012
Operable Unit: 13
Action Name: FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date: 09/21/2012
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EPA ID: CA1570024504
Contaminated Media: Landfill Gas
Site ID: 0902725
Action ID: 15
Action Completion Date: 09/30/2012
Operable Unit: 13
Action Name: FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date: 09/21/2012
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EPA ID: CA1570024504
Contaminated Media: Solid Waste
Site ID: 0902725
Action ID: 5
Action Completion Date: 09/30/2009
Operable Unit: 15
Action Name: FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date: 09/16/2009
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EPA ID: CA1570024504
Contaminated Media: Solid Waste
Site ID: 0902725
Action ID: 5
Action Completion Date: 09/30/2009
Operable Unit: 15
Action Name: FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date: 09/16/2009
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EPA ID: CA1570024504
Contaminated Media: Debris
Site ID: 0902725
Action ID: 12
Action Completion Date: 09/30/2008
Operable Unit: 11
Action Name: FF ROD (RCRA Statement of Basis/RTC)

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Action Taken Date: 08/04/2008
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EPA ID: CA1570024504
Contaminated Media: Soil
Site ID: 0902725
Action ID: 5
Action Completion Date: 09/30/2009
Operable Unit: 15
Action Name: FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date: 09/16/2009
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EPA ID: CA1570024504
Contaminated Media: Solid Waste
Site ID: 0902725
Action ID: 5
Action Completion Date: 09/30/2009
Operable Unit: 15
Action Name: FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date: 09/16/2009
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EPA ID: CA1570024504
Contaminated Media: Solid Waste
Site ID: 0902725
Action ID: 1
Action Completion Date: 09/30/2012
Operable Unit: 02
Action Name: FF ROD Amendment
Action Taken Date: 09/27/2012
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EPA ID: CA1570024504
Contaminated Media: Solid Waste
Site ID: 0902725
Action ID: 1
Action Completion Date: 09/30/2012
Operable Unit: 02
Action Name: FF ROD Amendment
Action Taken Date: 09/27/2012
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

EPA ID:	CA1570024504
Contaminated Media:	Soil
Site ID:	0902725
Action ID:	1
Action Completion Date:	09/30/2012
Operable Unit:	02
Action Name:	FF ROD Amendment
Action Taken Date:	09/27/2012
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported

EPA ID:	CA1570024504
Contaminated Media:	Debris
Site ID:	0902725
Action ID:	1
Action Completion Date:	09/30/2009
Operable Unit:	02
Action Name:	FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date:	06/24/2009
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported

EPA ID:	CA1570024504
Contaminated Media:	Soil
Site ID:	0902725
Action ID:	4
Action Completion Date:	09/30/2006
Operable Unit:	06
Action Name:	FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date:	09/28/2006
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported

EPA ID:	CA1570024504
Contaminated Media:	Groundwater
Site ID:	0902725
Action ID:	4
Action Completion Date:	09/30/2006
Operable Unit:	06
Action Name:	FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date:	09/28/2006
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported

EPA ID:	CA1570024504
Contaminated Media:	Soil
Site ID:	0902725
Action ID:	12
Action Completion Date:	09/30/2008

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Operable Unit:	11
Action Name:	FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date:	08/04/2008
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
EPA ID:	CA1570024504
Contaminated Media:	Debris
Site ID:	0902725
Action ID:	15
Action Completion Date:	09/30/2012
Operable Unit:	13
Action Name:	FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date:	09/21/2012
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
EPA ID:	CA1570024504
Contaminated Media:	Soil
Site ID:	0902725
Action ID:	1
Action Completion Date:	10/30/2013
Operable Unit:	11
Action Name:	FF ESD
Action Taken Date:	06/28/2013
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
EPA ID:	CA1570024504
Contaminated Media:	Groundwater
Site ID:	0902725
Action ID:	15
Action Completion Date:	09/30/2012
Operable Unit:	13
Action Name:	FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date:	09/21/2012
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
EPA ID:	CA1570024504
Contaminated Media:	Solid Waste
Site ID:	0902725
Action ID:	1
Action Completion Date:	09/30/2012
Operable Unit:	02
Action Name:	FF ROD Amendment
Action Taken Date:	09/27/2012
Event Code:	Not reported
Contact Name:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Contact Telephone: Not reported
Event: Not reported

EPA ID: CA1570024504
Contaminated Media: Soil
Site ID: 0902725
Action ID: 1
Action Completion Date: 09/30/2012
Operable Unit: 02
Action Name: FF ROD Amendment
Action Taken Date: 09/27/2012
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EPA ID: CA1570024504
Contaminated Media: Groundwater
Site ID: 0902725
Action ID: 1
Action Completion Date: 09/30/2009
Operable Unit: 02
Action Name: FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date: 06/24/2009
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EPA ID: CA1570024504
Contaminated Media: Solid Waste
Site ID: 0902725
Action ID: 1
Action Completion Date: 09/30/2009
Operable Unit: 02
Action Name: FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date: 06/24/2009
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EPA ID: CA1570024504
Contaminated Media: Groundwater
Site ID: 0902725
Action ID: 1
Action Completion Date: 09/30/2009
Operable Unit: 02
Action Name: FF ROD (RCRA Statement of Basis/RTC)
Action Taken Date: 06/24/2009
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

US INST CONTROLS:

Name:	EDWARDS AIR FORCE BASE
Address:	AFFTC EDWARDS AFB
Address 2:	5 EAST POPSON AVE, BLDG 2650A
City,State,Zip:	EDWARDS AFB, CA 93524
EPA ID:	CA1570024504
Site ID:	0902725
Action Name:	FF ROD (RCRA Statement of Basis/RTC)
Action ID:	15
Operable Unit:	13
Action Completion Date:	09/30/2012
Actual Date:	09/21/2012
Contaminated Media:	Solid Waste
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported

Name:	EDWARDS AIR FORCE BASE
Address:	AFFTC EDWARDS AFB
Address 2:	5 EAST POPSON AVE, BLDG 2650A
City,State,Zip:	EDWARDS AFB, CA 93524
EPA ID:	CA1570024504
Site ID:	0902725
Action Name:	FF ROD (RCRA Statement of Basis/RTC)
Action ID:	12
Operable Unit:	11
Action Completion Date:	09/30/2008
Actual Date:	08/04/2008
Contaminated Media:	Debris
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported

Name:	EDWARDS AIR FORCE BASE
Address:	AFFTC EDWARDS AFB
Address 2:	5 EAST POPSON AVE, BLDG 2650A
City,State,Zip:	EDWARDS AFB, CA 93524
EPA ID:	CA1570024504
Site ID:	0902725
Action Name:	FF ROD (RCRA Statement of Basis/RTC)
Action ID:	5
Operable Unit:	15
Action Completion Date:	09/30/2009
Actual Date:	09/16/2009
Contaminated Media:	Solid Waste
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported

Name:	EDWARDS AIR FORCE BASE
Address:	AFFTC EDWARDS AFB
Address 2:	5 EAST POPSON AVE, BLDG 2650A
City,State,Zip:	EDWARDS AFB, CA 93524
EPA ID:	CA1570024504

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Site ID: 0902725
Action Name: FF ROD (RCRA Statement of Basis/RTC)
Action ID: 15
Operable Unit: 13
Action Completion Date: 09/30/2012
Actual Date: 09/21/2012
Contaminated Media: Groundwater
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

Name: EDWARDS AIR FORCE BASE
Address: AFFTC EDWARDS AFB
Address 2: 5 EAST POPSON AVE, BLDG 2650A
City,State,Zip: EDWARDS AFB, CA 93524
EPA ID: CA1570024504
Site ID: 0902725
Action Name: FF ESD
Action ID: 1
Operable Unit: 11
Action Completion Date: 10/30/2013
Actual Date: 06/28/2013
Contaminated Media: Soil
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

Name: EDWARDS AIR FORCE BASE
Address: AFFTC EDWARDS AFB
Address 2: 5 EAST POPSON AVE, BLDG 2650A
City,State,Zip: EDWARDS AFB, CA 93524
EPA ID: CA1570024504
Site ID: 0902725
Action Name: FF ROD (RCRA Statement of Basis/RTC)
Action ID: 3
Operable Unit: 04
Action Completion Date: 09/30/2007
Actual Date: 09/24/2007
Contaminated Media: Groundwater
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

Name: EDWARDS AIR FORCE BASE
Address: AFFTC EDWARDS AFB
Address 2: 5 EAST POPSON AVE, BLDG 2650A
City,State,Zip: EDWARDS AFB, CA 93524
EPA ID: CA1570024504
Site ID: 0902725
Action Name: FF ROD (RCRA Statement of Basis/RTC)
Action ID: 1
Operable Unit: 02
Action Completion Date: 09/30/2009
Actual Date: 06/24/2009

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Contaminated Media: Soil
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

Name: EDWARDS AIR FORCE BASE
Address: AFFTC EDWARDS AFB
Address 2: 5 EAST POPSON AVE, BLDG 2650A
City,State,Zip: EDWARDS AFB, CA 93524
EPA ID: CA1570024504
Site ID: 0902725
Action Name: FF ROD (RCRA Statement of Basis/RTC)
Action ID: 3
Operable Unit: 04
Action Completion Date: 09/30/2007
Actual Date: 09/24/2007
Contaminated Media: Soil Gas
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

Name: EDWARDS AIR FORCE BASE
Address: AFFTC EDWARDS AFB
Address 2: 5 EAST POPSON AVE, BLDG 2650A
City,State,Zip: EDWARDS AFB, CA 93524
EPA ID: CA1570024504
Site ID: 0902725
Action Name: FF ROD (RCRA Statement of Basis/RTC)
Action ID: 15
Operable Unit: 13
Action Completion Date: 09/30/2012
Actual Date: 09/21/2012
Contaminated Media: Debris
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

Name: EDWARDS AIR FORCE BASE
Address: AFFTC EDWARDS AFB
Address 2: 5 EAST POPSON AVE, BLDG 2650A
City,State,Zip: EDWARDS AFB, CA 93524
EPA ID: CA1570024504
Site ID: 0902725
Action Name: FF ROD (RCRA Statement of Basis/RTC)
Action ID: 4
Operable Unit: 06
Action Completion Date: 09/30/2006
Actual Date: 09/28/2006
Contaminated Media: Groundwater
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Name: EDWARDS AIR FORCE BASE
Address: AFFTC EDWARDS AFB
Address 2: 5 EAST POPSON AVE, BLDG 2650A
City,State,Zip: EDWARDS AFB, CA 93524
EPA ID: CA1570024504
Site ID: 0902725
Action Name: FF ROD (RCRA Statement of Basis/RTC)
Action ID: 12
Operable Unit: 11
Action Completion Date: 09/30/2008
Actual Date: 08/04/2008
Contaminated Media: Soil
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

Name: EDWARDS AIR FORCE BASE
Address: AFFTC EDWARDS AFB
Address 2: 5 EAST POPSON AVE, BLDG 2650A
City,State,Zip: EDWARDS AFB, CA 93524
EPA ID: CA1570024504
Site ID: 0902725
Action Name: FF ROD (RCRA Statement of Basis/RTC)
Action ID: 15
Operable Unit: 13
Action Completion Date: 09/30/2012
Actual Date: 09/21/2012
Contaminated Media: Landfill Gas
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

Name: EDWARDS AIR FORCE BASE
Address: AFFTC EDWARDS AFB
Address 2: 5 EAST POPSON AVE, BLDG 2650A
City,State,Zip: EDWARDS AFB, CA 93524
EPA ID: CA1570024504
Site ID: 0902725
Action Name: FF ROD (RCRA Statement of Basis/RTC)
Action ID: 1
Operable Unit: 02
Action Completion Date: 09/30/2009
Actual Date: 06/24/2009
Contaminated Media: Groundwater
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

Name: EDWARDS AIR FORCE BASE
Address: AFFTC EDWARDS AFB
Address 2: 5 EAST POPSON AVE, BLDG 2650A
City,State,Zip: EDWARDS AFB, CA 93524
EPA ID: CA1570024504
Site ID: 0902725

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Action Name:	FF ROD (RCRA Statement of Basis/RTC)
Action ID:	1
Operable Unit:	02
Action Completion Date:	09/30/2009
Actual Date:	06/24/2009
Contaminated Media:	Solid Waste
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported

ENVIROSTOR:

Name:	EDWARDS AIR FORCE BASE - IR/MMRP
Address:	470 SQ MI; 60 MI NE OF LOS ANGELES, CA
City,State,Zip:	EDWARDS, CA 93523
Facility ID:	15970001
Status:	Active
Status Date:	05/01/1986
Site Code:	100052
Site Type:	Federal Superfund
Site Type Detailed:	Open Base
Acres:	300800
NPL:	YES
Regulatory Agencies:	SMBRP, RWQCB 6V - Lahontan, US EPA
Lead Agency:	US EPA
Program Manager:	Kevin Depies
Supervisor:	Peter Bailey
Division Branch:	Cleanup Legacy Landfills
Assembly:	36
Senate:	16
Special Program:	DSMOA
Restricted Use:	YES
Site Mgmt Req:	NONE SPECIFIED
Funding:	DERA
Latitude:	34.90604
Longitude:	-117.8825
APN:	NONE SPECIFIED
Past Use:	AIRCRAFT MAINTENANCE, FUEL - AIRCRAFT STORAGE/ REFUELING, AIRCRAFT MAINTENANCE, RESEARCH - OTHER, AIRCRAFT MAINTENANCE, AIRFIELD OPERATIONS, RESEARCH - OTHER, AEROSPACE ROCKET TESTING/LAUNCH, FUEL - AIRCRAFT STORAGE/ REFUELING, AEROSPACE ROCKET TESTING/LAUNCH, RESEARCH - AEROSPACE, LANDFILL - CONSTRUCTION, LANDFILL - DOMESTIC, LANDFILL - HAZARDOUS WASTE, FUEL - AIRCRAFT STORAGE/ REFUELING, AIRCRAFT MAINTENANCE, FUEL - AIRCRAFT STORAGE/ REFUELING, AEROSPACE ROCKET TESTING/LAUNCH, AEROSPACE ROCKET TESTING/LAUNCH, RESEARCH - AEROSPACE, DEGREASING FACILITY, JET FUEL STORAGE/REFUELING, AIRCRAFT MAINTENANCE, AIRCRAFT MAINTENANCE, AIRFIELD OPERATIONS, DEGREASING FACILITY, DEGREASING FACILITY, ABOVE GROUND STORAGE TANKS, AEROSPACE MANUFACTURING/MAINTENANCE, AEROSPACE ROCKET TESTING/LAUNCH, AIRCRAFT MAINTENANCE, AIRFIELD OPERATIONS, FUEL - AIRCRAFT STORAGE/ REFUELING, AIRCRAFT MAINTENANCE, RESEARCH - CHEMICAL, AEROSPACE MANUFACTURING/MAINTENANCE, FUEL - AIRCRAFT STORAGE/ REFUELING, AEROSPACE ROCKET TESTING/LAUNCH, AIRFIELD OPERATIONS, RESEARCH - CHEMICAL, AEROSPACE MANUFACTURING/MAINTENANCE, AEROSPACE ROCKET TESTING/LAUNCH, RESEARCH - CHEMICAL, RESEARCH - CHEMICAL, DEGREASING FACILITY, AIRCRAFT MAINTENANCE, AIRFIELD OPERATIONS, FUEL - AIRCRAFT STORAGE/ REFUELING, JET FUEL STORAGE/REFUELING, AEROSPACE

EDWARDS AIR FORCE BASE (Continued) **1000155217**

MANUFACTURING/MAINTENANCE, AEROSPACE ROCKET TESTING/LAUNCH, AEROSPACE MANUFACTURING/MAINTENANCE, AEROSPACE ROCKET TESTING/LAUNCH, AEROSPACE ROCKET TESTING/LAUNCH, DEGREASING FACILITY, FUEL - AIRCRAFT STORAGE/ REFUELING, AIRCRAFT MAINTENANCE, FUEL - AIRCRAFT STORAGE/ REFUELING, DEGREASING FACILITY, AIRCRAFT MAINTENANCE, AEROSPACE ROCKET TESTING/LAUNCH, AIRCRAFT MAINTENANCE, LANDFILL - HAZARDOUS WASTE, OPEN BURN/OPEN DETONATION, RESEARCH - AEROSPACE, RESEARCH - CHEMICAL, AEROSPACE ROCKET TESTING/LAUNCH, RESEARCH - AEROSPACE, AEROSPACE ROCKET TESTING/LAUNCH, RESEARCH - AEROSPACE, WASTE - INDUSTRIAL WASTE LINE, LANDFILL - HAZARDOUS WASTE, AEROSPACE ROCKET TESTING/LAUNCH, AEROSPACE MANUFACTURING/MAINTENANCE, AEROSPACE ROCKET TESTING/LAUNCH, AIRFIELD OPERATIONS, FIRE TRAINING AREAS

Potential COC: Benzene Benzene Tetrachloroethylene (PCE TPH-JET FUEL 1,1-Dichloroethane 1,2-Dichloroethane (EDC Ethylbenzene 1,1,2,2-Tetrachloroethane Toluene 1,2,4-Trimethylbenzene Xylenes Benzene Methylene chloride Trichloroethylene (TCE Explosives (UXO, MEC Explosives (UXO, MEC Explosives (UXO, MEC Perchlorate Polynuclear aromatic hydrocarbons (PAHs Trichloroethylene (TCE N-Nitrosodimethylamine Methyl tertbutyl ether (MTBE Perchlorate Tetrachloroethylene (PCE Trichloroethylene (TCE Vinyl chloride 1,2-Dichloroethylene (cis 1,4-Dioxane N-Nitrosodimethylamine Perchlorate Perchlorate Polychlorinated biphenyls (PCBs Polychlorinated biphenyls (PCBs Polynuclear aromatic hydrocarbons (PAHs Polynuclear aromatic hydrocarbons (PAHs Polynuclear aromatic hydrocarbons (PAHs Tetrachloroethylene (PCE Carbon tetrachloride Polynuclear aromatic hydrocarbons (PAHs Trichloroethylene (TCE 1,2-Dichloroethylene (cis 1,2-Dichloroethylene (trans Tetrachloroethylene (PCE Trichloroethylene (TCE Tetrachloroethylene (PCE N-Nitrosodimethylamine TPH-gas TPH-JET FUEL TPH-JET FUEL Trichloroethylene (TCE 1,2-Dichloroethylene (cis 1,2-Dichloroethylene (trans Benzene Tetrachloroethylene (PCE 1,1,1-Trichloroethane (TCA 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethylene 1,2,4-Trimethylbenzene 1,2-Dichloroethane (EDC 1,2-Dichloroethylene (cis 1,3,5-Trimethylbenzene 1,4-Dichlorobenzene 1,4-Dioxane Benzene Chloromethane (methyl chloride Ethylbenzene Methyl tertbutyl ether (MTBE Methylene chloride N-Nitrosodimethylamine Naphthalene Tetrachloroethylene (PCE Toluene Trichloroethylene (TCE Xylenes Trichloroethylene (TCE Trichloroethylene (TCE Trichloroethylene (TCE Trichloroethylene (TCE Aluminum Barium and compounds Beryllium and compounds Naphthalene Antimony and compounds Arsenic Molybdenum Nickel Antimony and compounds Cadmium and compounds Lead Mercury and compounds Nickel Antimony and compounds Cadmium and compounds Ethylbenzene Lead Manganese and compounds Polychlorinated biphenyls (PCBs Toluene Xylenes Zinc Beryllium and compounds Beryllium and compounds Beryllium and compounds Chromium III Chromium VI Cobalt Iron Mercury and compounds Thallium and compounds Vanadium and compounds Zinc Chromium III Chromium VI Copper and compounds Iron Lead Nickel Perchlorate Selenium Zinc 1,2-Dichloroethane (EDC Benzene Trichloroethylene (TCE 1,2-Dichloroethane (EDC 1,4-Dichlorobenzene Chloroform Hexachlorobutadiene Nickel Trichloroethylene (TCE 1,2-Dichloroethane (EDC 1,2-Dichloroethylene (cis Benzene Tetrachloroethylene (PCE Trichloroethylene (TCE Vinyl chloride 1,1-Dichloroethylene 1,2-Dichloroethylene (cis Acetone Aluminum Antimony and compounds Arsenic Barium and compounds Beryllium and compounds Bis(2-ethylhexyl)phthalate (DEHP) Cadmium and compounds Chromium III Chromium VI Cobalt Copper and compounds Dieldrin Dimethyl phthalate Endrin Ethylbenzene Fluorine (soluble fluoride

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Iron Lead Mercury and compounds Methylene chloride Molybdenum Nickel Selenium Silver Toluene Trichloroethylene (TCE Vanadium and compounds Zinc n-Propylbenzene 1,1-Dichloroethylene 1,2-Dichloroethylene (cis 1,2-Dichloroethylene (trans 2,6-Dinitrotoluene (also see Dinitrotoluene mixture Acetone Barium and compounds Benz[a]anthracene Benzo[a]pyrene Benzo[b]fluoranthene Bis(2-ethylhexyl)phthalate (DEHP) Bromomethane (Methyl bromide Cadmium and compounds Chloromethane (methyl chloride Chromium III Chromium VI Chrysene Cobalt Copper and compounds Fluoranthene Indeno[1,2,3-cd]pyrene Iron Manganese and compounds Mercury and compounds Methylene chloride Molybdenum Nickel Nitrate Pyrene Tetrachloroethylene (PCE Thallium and compounds Toluene Trichloroethylene (TCE Vinyl chloride Xylenes Zinc 1,2-Dichloroethylene (cis Benzene Trichloroethylene (TCE 1,1,2-Trichloroethane 1,2-Dibromoethane (EDB Benzene Cadmium and compounds Tetrachloroethylene (PCE Trichloroethylene (TCE 1,1,2-Trichloroethane 1,2-Dibromoethane (EDB Benzene Cadmium and compounds Tetrachloroethylene (PCE Trichloroethylene (TCE 1,2,4-Trimethylbenzene Acetone Beryllium and compounds Bromodichloromethane Bromoform (tribromomethane Chloroform Cobalt Dibromochloromethane Mercury and compounds Trichloroethylene (TCE Xylenes 1,2,4-Trimethylbenzene 1,2-Dichloroethane (EDC 1,2-Dichloroethylene (cis Benzene Ethylbenzene Naphthalene Toluene Trichloroethylene (TCE Vinyl chloride Xylenes 39105 39106

Confirmed COC: Polynuclear aromatic hydrocarbons (PAHs Tetrachloroethylene (PCE Carbon tetrachloride Benzene Methylene chloride Trichloroethylene (TCE Chloroform Cobalt Dibromochloromethane Mercury and compounds Xylenes 1,2,4-Trimethylbenzene Trichloroethylene (TCE Acetone Beryllium and compounds Bromodichloromethane Bromoform (tribromomethane Benzene Cadmium and compounds 1,2-Dibromoethane (EDB 1,1,2-Trichloroethane Tetrachloroethylene (PCE Trichloroethylene (TCE Benzene Cadmium and compounds 1,2-Dibromoethane (EDB 1,1,2-Trichloroethane Tetrachloroethylene (PCE Trichloroethylene (TCE Chromium III Chromium VI Cobalt Mercury and compounds Vanadium and compounds Zinc Iron Thallium and compounds Benzene 1,2-Dichloroethylene (cis Trichloroethylene (TCE Chloroform 1,4-Dichlorobenzene 1,2-Dichloroethane (EDC Nickel Hexachlorobutadiene Trichloroethylene (TCE Endrin Lead Arsenic Cadmium and compounds Chromium III Chromium VI Cobalt Copper and compounds 1,1-Dichloroethylene 1,2-Dichloroethylene (cis Dieldrin Mercury and compounds Methylene chloride Molybdenum Nickel Vanadium and compounds Zinc Dimethyl phthalate Ethylbenzene Fluorine (soluble fluoride Iron n-Propylbenzene Selenium Toluene Silver Trichloroethylene (TCE Acetone Aluminum Antimony and compounds Barium and compounds Beryllium and compounds Bis(2-ethylhexyl)phthalate (DEHP) Benzene Ethylbenzene Xylenes 1,1,2,2-Tetrachloroethane 1,2,4-Trimethylbenzene Tetrachloroethylene (PCE 1,1-Dichloroethane 1,2-Dichloroethane (EDC Toluene TPH-JET FUEL Lead Cadmium and compounds Manganese and compounds Xylenes Zinc Ethylbenzene Toluene Polychlorinated biphenyls (PCBs Antimony and compounds Lead Perchlorate Chromium III Chromium VI Copper and compounds Nickel Zinc Iron Selenium Polychlorinated biphenyls (PCBs Benzene Benzene 1,2-Dichloroethane (EDC 1,2-Dichloroethylene (cis Tetrachloroethylene (PCE Trichloroethylene (TCE Vinyl chloride Benzene 1,2-Dichloroethane (EDC Trichloroethylene (TCE Trichloroethylene (TCE Tetrachloroethylene (PCE Trichloroethylene (TCE 30003-NO 30022-NO 3002501-NO 30027-NO 30195-NO 30196-NO Beryllium and compounds No Contaminants found Trichloroethylene (TCE Polynuclear

EDWARDS AIR FORCE BASE (Continued) **1000155217**

aromatic hydrocarbons (PAHs Polynuclear aromatic hydrocarbons (PAHs No Contaminants found Tetrachloroethylene (PCE N-Nitrosodimethylamine No Contaminants found No Contaminants found Trichloroethylene (TCE Naphthalene Aluminum Barium and compounds Beryllium and compounds TPH-gas TPH-JET FUEL Perchlorate Perchlorate Explosives (UXO, MEC Perchlorate Polynuclear aromatic hydrocarbons (PAHs Trichloroethylene (TCE N-Nitrosodimethylamine Methyl tertbutyl ether (MTBE Benzene Chloromethane (methyl chloride 1,4-Dichlorobenzene 1,1-Dichloroethane 1,2-Dichloroethane (EDC 1,1-Dichloroethylene 1,2-Dichloroethylene (cis Methylene chloride N-Nitrosodimethylamine Xylenes 1,4-Dioxane Ethylbenzene Naphthalene Toluene 1,1,2-Trichloroethane 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Tetrachloroethylene (PCE 1,1,1-Trichloroethane (TCA Trichloroethylene (TCE Benzene 1,2-Dichloroethane (EDC 1,2-Dichloroethylene (cis Xylenes Ethylbenzene Naphthalene Toluene 1,2,4-Trimethylbenzene Trichloroethylene (TCE Vinyl chloride Trichloroethylene (TCE Lead Cadmium and compounds Mercury and compounds Nickel Antimony and compounds Cadmium and compounds Chloromethane (methyl chloride Chromium III Chromium VI Cobalt Copper and compounds 1,1-Dichloroethylene 1,2-Dichloroethylene (cis 1,2-Dichloroethylene (trans Manganese and compounds Mercury and compounds Methylene chloride Molybdenum Nickel Nitrate Xylenes Zinc 2,6-Dinitrotoluene (also see Dinitrotoluene mixture Iron Benz[a]anthracene Benzo[b]fluoranthene Benzo[a]pyrene Chrysene Fluoranthene Indeno[1,2,3-cd]pyrene Pyrene Thallium and compounds Toluene Tetrachloroethylene (PCE Trichloroethylene (TCE Vinyl chloride Acetone Barium and compounds Bis(2-ethylhexyl)phthalate (DEHP) Bromomethane (Methyl bromide Arsenic Molybdenum Nickel Antimony and compounds Explosives (UXO, MEC No Contaminants found Beryllium and compounds Beryllium and compounds Polychlorinated biphenyls (PCBs 30011-NO Polynuclear aromatic hydrocarbons (PAHs Trichloroethylene (TCE 1,2-Dichloroethylene (cis 1,2-Dichloroethylene (trans Methyl tertbutyl ether (MTBE Perchlorate Tetrachloroethylene (PCE 30027-NO Vinyl chloride 1,2-Dichloroethylene (cis 1,4-Dioxane N-Nitrosodimethylamine 39105 39106

Potential Description: OTH, SOIL, OTH, OTH, SOIL, OTH, SOIL, SURFW, OTH, SOIL, SURFW, SOIL, OTH, SOIL, OTH, OTH, SOIL, OTH, SOIL, SOIL, SOIL, SOIL, OTH, OTH, SOIL, OTH, OTH, SOIL, OTH, SOIL, IA, OTH, SOIL, SV, OTH, SOIL, SOIL, IA, OTH, SOIL, SV, SV, IA, OTH, OTH, SOIL, OTH, SOIL, OTH, SOIL, OTH, SOIL, OTH, SOIL, OTH, SOIL, OTH, SOIL, SOIL, SOIL, SOIL, SOIL, OTH, SOIL, OTH, SOIL, SV, IA

Alias Name: EDWARDS AFB
Alias Type: Alternate Name
Alias Name: CA1570024504
Alias Type: EPA Identification Number
Alias Name: 110033616120
Alias Type: EPA (FRS #)
Alias Name: DOD100074300
Alias Type: GeoTracker Global ID
Alias Name: DOD100074400
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Alias Name: DOD100074500
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Alias Name: DOD100074600
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Alias Name: DOD100075900
Alias Type: GeoTracker Global ID

EDWARDS AIR FORCE BASE (Continued) **1000155217**

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EDWARDS AIR FORCE BASE (Continued) **1000155217**

Alias Type:	GeoTracker Global ID
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EDWARDS AIR FORCE BASE (Continued) **1000155217**

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EDWARDS AIR FORCE BASE (Continued) **1000155217**

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EDWARDS AIR FORCE BASE (Continued) **1000155217**

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EDWARDS AIR FORCE BASE (Continued) **1000155217**

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EDWARDS AIR FORCE BASE (Continued) **1000155217**

Alias Name:	DOD100110800
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Alias Name:	DOD100111100
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100111200
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100111300
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100111400
Alias Type:	GeoTracker Global ID
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Alias Type:	GeoTracker Global ID
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Alias Name:	DOD100111800
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Alias Name:	DOD100111900
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Alias Name:	DOD100112700
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100112800
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100112900
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100113000
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100113100
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100113200
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100113300
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100113400
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100113500
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100113600

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Alias Type:	GeoTracker Global ID
Alias Name:	DOD100113700
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100113800
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100113900
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100114000
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100114100
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100114200
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100114300
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100114400
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100114500
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100114600
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100114700
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Alias Name:	DOD100114900
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Alias Name:	DOD100115100
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100115200
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Alias Name:	DOD100115800
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100115900
Alias Type:	GeoTracker Global ID
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Alias Name:	DOD100116100
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100116200
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100116300
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100116400
Alias Type:	GeoTracker Global ID

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Alias Name:	DOD100116500
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100116600
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100116700
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100116800
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Alias Name:	DOD100117200
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Alias Name:	DOD100117300
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Alias Name:	DOD100117400
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100117500
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Alias Name:	DOD100117600
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Alias Name:	DOD100117700
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Alias Name:	DOD100117800
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100117900
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100118000
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Alias Name:	DOD100118100
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100118200
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Alias Name:	DOD100118300
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Alias Name:	DOD100118400
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Alias Name:	DOD100118500
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100118600
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Alias Name:	DOD100118900
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Alias Type:	GeoTracker Global ID
Alias Name:	DOD100119100
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100119200
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100119300

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Alias Type:	GeoTracker Global ID
Alias Name:	DOD100119400
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100119500
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100119600
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100119700
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100119800
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100119900
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100120000
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100120100
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100120200
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100120300
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100120400
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100120500
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100120600
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100120700
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100120800
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Alias Name:	DOD100120900
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Alias Name:	DOD100121200
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Alias Name:	DOD100121400
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Alias Type:	GeoTracker Global ID
Alias Name:	DOD100121900
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100122000
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100122100
Alias Type:	GeoTracker Global ID

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Alias Name:	DOD100122200
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100122300
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100122400
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100122500
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Alias Name:	DOD100122700
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100122800
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100122900
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Alias Type:	GeoTracker Global ID
Alias Name:	DOD100123100
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Alias Name:	DOD100123400
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Alias Type:	GeoTracker Global ID
Alias Name:	DOD100123700
Alias Type:	GeoTracker Global ID
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Alias Type:	GeoTracker Global ID
Alias Name:	DOD100124800
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100124900
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100125000

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Alias Type:	GeoTracker Global ID
Alias Name:	DOD100125100
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100125200
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100125300
Alias Type:	GeoTracker Global ID
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Alias Name:	DOD100126100
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100126200
Alias Type:	GeoTracker Global ID
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Alias Name:	DOD100127100
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100127200
Alias Type:	GeoTracker Global ID
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Alias Name:	DOD100127400
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Alias Name:	DOD100127500
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100127600
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100127700
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100127800
Alias Type:	GeoTracker Global ID

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Alias Name:	DOD100127900
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100128000
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100128100
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100128200
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Alias Type:	GeoTracker Global ID
Alias Name:	DOD100130500
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100130600
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100130700

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Alias Type:	GeoTracker Global ID
Alias Name:	DOD100130800
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100130900
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100131000
Alias Type:	GeoTracker Global ID
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Alias Name:	DOD100131600
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100131700
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Alias Name:	DOD100131800
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Alias Name:	DOD100131900
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Alias Name:	DOD100132100
Alias Type:	GeoTracker Global ID
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Alias Name:	DOD100132400
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Alias Name:	DOD100132600
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100132700
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100132800
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Alias Name:	DOD100132900
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Alias Name:	DOD100133000
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Alias Name:	DOD100133100
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Alias Name:	DOD100133500
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100133600
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100133700
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100133800
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100133900
Alias Type:	GeoTracker Global ID

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Alias Name:	DOD100134000
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100134100
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100134200
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100134300
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Alias Name:	DOD100134400
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Alias Name:	DOD100134500
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Alias Name:	DOD100134600
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100134700
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Alias Name:	DOD100134800
Alias Type:	GeoTracker Global ID
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Alias Name:	DOD100136900
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100137000
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100137100
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100137200

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Alias Type:	GeoTracker Global ID
Alias Name:	DOD100137300
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100137400
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100137500
Alias Type:	GeoTracker Global ID
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Alias Type:	GeoTracker Global ID
Alias Name:	DOD100140000
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100140100
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100140200
Alias Type:	GeoTracker Global ID

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Alias Name:	DOD100140300
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100140400
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100140500
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100140600
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Alias Name:	DOD100142700
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100142800
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100142900
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100143000
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100143100

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Alias Type:	GeoTracker Global ID
Alias Name:	DOD100143200
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100143300
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100143400
Alias Type:	GeoTracker Global ID
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Alias Name:	DOD100144100
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Alias Name:	DOD100145700
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100145800
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100145900
Alias Type:	GeoTracker Global ID

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Alias Name:	DOD100146000
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100146100
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100146200
Alias Type:	GeoTracker Global ID
Alias Name:	DOD100146300
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Alias Name:	DOD100146500
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Alias Type:	GeoTracker Global ID
Alias Name:	DOD100146900
Alias Type:	GeoTracker Global ID
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EDWARDS AIR FORCE BASE (Continued) **1000155217**

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EDWARDS AIR FORCE BASE (Continued) **1000155217**

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EDWARDS AIR FORCE BASE (Continued) **1000155217**

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Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Federal Facility Agreement
Completed Date:	09/25/1990
Comments:	Not reported

Completed Area Name:	1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name:	Site 21
Completed Document Type:	Correspondence
Completed Date:	05/18/2017
Comments:	Because of the evidence of a CERCLA hazardous substances release, ty agreement between the RPMs, Site 21 has been transferred from the Air Force's Compliance Restoration Program ("Fuels Program") back to the CERCLA program.

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Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment/Site Inspection Report (PA/SI)
Completed Date: 06/01/2016
Comments: Preliminary Assessment Report for Perfluorinated Compounds at EAFB. This report was issued as a final and provided to DTSC only electronically. The Air Force verbalized a request for DTSC input to prepare for the Site Inspection/Investigation scheduled for 2016

Completed Area Name: 8 - Operable Unit 8, Northwest Main Base
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 01/15/2010
Comments: Pre-Design Investigation Work Plan, sites 226, 257, and 299. DTSC concurred with the work; however some of our comments may not have been adequately addressed. These includes questions regarding the background value being used for arsenic, the location of the proposed upgradient well at Site 257 and vertical contaminant groundwater control at Site 299.

Completed Area Name: 5/10 - Operable Units 5 and 10, North Base
Completed Sub Area Name: Site 285
Completed Document Type: Monitoring Report
Completed Date: 08/26/2016
Comments: Site 285 GETS Annual Operation and Maintenance (10/14-9/15) Report

Completed Area Name: 4/9 AFRL Misc. Documents
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Plan
Completed Date: 12/12/2016
Comments: Groundwater Sampling and Analyses Plan Volume III, OU 4/9 Long-Term Monitoring Optimization

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 76
Completed Document Type: Removal Action Workplan
Completed Date: 10/14/2016
Comments: Completed

Completed Area Name: 6 - Operable Unit 6, NASA Dryden
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/30/2016
Comments: This document was submitted as a Final in accordance with agreement with AF made in 2011. There are not Draft or Draft Final versions associated with this document.

Completed Area Name: 6 - Operable Unit 6, NASA Dryden
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 09/21/2016
Comments: Completed. Included in OU6 Second Five-Year Review Report.

Completed Area Name: 8 - Operable Unit 8, Northwest Main Base
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 06/22/2016

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Comments: 2010 Well Installation Technical Memorandum for Sites 226, 257, and 299. Because of DTSC's limited resources, this report was not reviewed. However, it is a low priority document essentially just documenting the results of the well installation activities and therefor not requiring review.

Completed Area Name: 8 - Operable Unit 8, Northwest Main Base
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 06/12/2017
Comments: 2013 Well Installation Technical Memorandum for Sites 61, 299, and 301. Provides the details of data gaps wells that were installed in 2013.

Completed Area Name: 4A - AFRL Area
Completed Sub Area Name: Site 37
Completed Document Type: Operations and Maintenance Report
Completed Date: 10/20/2016
Comments: Site 37 SVE O&M and Building 8595 Vapor Intrusion Monitoring Report for 2015

Completed Area Name: 6 - Operable Unit 6, NASA Dryden
Completed Sub Area Name: Not reported
Completed Document Type: 5 Year Review Reports
Completed Date: 09/22/2016
Comments: EPA submitted concurrence letter.

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 10/11/2016
Comments: Operable Units 1/8 2016 Groundwater Monitoring Schedule

Completed Area Name: 4A - AFRL Area
Completed Sub Area Name: Site 13
Completed Document Type: Monitoring Report
Completed Date: 06/14/2016
Comments: Site 13 Landfill Annual Compliance Monitoring Report for 2015

Completed Area Name: 4A - AFRL Area
Completed Sub Area Name: Site 13
Completed Document Type: Monitoring Report
Completed Date: 03/12/2015
Comments: Site 13 Landfill Annual Compliance Monitoring Report for 2013

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 86
Completed Document Type: Remedial Action Implementation Workplan
Completed Date: 10/14/2016
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Workplan
Completed Date: 03/16/2017
Comments: Site Inspection Workplan (UFP-QAPP) for Aqueous Film Forming Foam Usage (PFCs/PFAS) at EAFB

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Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Enforceable Schedule
Completed Date: 09/12/2016
Comments: 2016 Update to the FFA Schedule

Completed Area Name: 4A - AFRL Arroyos
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/28/2017
Comments: AFRL Arroyos 2015 GWM Report

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Well Completion Report
Completed Date: 05/02/2017
Comments: Sites 17, 19, 51, 58, and 66 Cone Penetration Test Investigation and Site 58 Well Installation Report

Completed Area Name: 8 - 25 Operable Unit - 8 - Site 25 Exotic Fuels
Completed Sub Area Name: Site 25
Completed Document Type: Monitoring Report
Completed Date: 04/13/2017
Comments: Site 25 Groundwater Monitoring Report for 2015

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Plan
Completed Date: 10/11/2016
Comments: OU 1/8 Groundwater Monitoring Sampling Plan for 2016. 2016 is an "off year" for sampling; however the RPMs agreed that data was needed from a select group of wells to provide data for the upcoming FS. The wells selected for sampling were agreed upon in the July 2016 RPM meeting.

Completed Area Name: 4/9 Mars Blvd Sites
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/03/2017
Comments: Mars Blvd Sites 2015 GWM Report

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Plan
Completed Date: 10/06/2016
Comments: OU 1/8 2016 Groundwater Monitoring Sampling Plan. A select list of wells will be sampled, agreed upon by the Air Force and regulators during the July 2016 RPM meeting. These data will be used to augment the pending OU 1/8 Feasibility Study.

Completed Area Name: 2 - Operable Unit 2, South Base - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 12/28/2016
Comments: Sites 81 and 102 NTCRA Pre-Design Survey Field Activities Letter Report. This report summarizes further site characterization which will be used to finalize the planned "removal action".

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Completed Area Name:	8 - Operable Unit 8, Northwest Main Base
Completed Sub Area Name:	Not reported
Completed Document Type:	Feasibility Study Report
Completed Date:	10/12/2009
Comments:	Not reported

Completed Area Name:	7 - Operable Unit 7, Basewide Misc.
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Investigation Report
Completed Date:	10/22/2008
Comments:	The Final OU 7 RI Report covers 8 sites that moved past the PA/SI phase. Of the 8 sites, 4 sites (Sites 267, 269, 272, and 293) require no further action after review and agreement by the RPMs. Four sites (Sites 3, 280, 294, and 339) will continue on into the Feasibility Study phase.

Completed Area Name:	7 - Operable Unit 7, Basewide Misc. - MULTIPLE SITES
Completed Sub Area Name:	Not reported
Completed Document Type:	Feasibility Study Report
Completed Date:	01/11/2010
Comments:	This is the FS for Sites 280, 294, and 339. The Air Force has evaluated clean-up remedies for the contamination in soil at these sites. DTSC has identified some potential human health risk assessment procedure issues and will work with the Air Force to resolve these.

Completed Area Name:	6 - Operable Unit 6, NASA Dryden
Completed Sub Area Name:	Not reported
Completed Document Type:	Record of Decision
Completed Date:	10/19/2006
Comments:	The OU-6 ROD addresses six sites (N1, N2, N3, N4, N7, and AOC N14). The selected remedy OU6 Soils for all six sites is No Action. The risks associated with the soils were all within the acceptable risk range. Three of the sites (N2, N3, and N7) are the origin of the OU wide commingled groundwater plume. The groundwater contaminants are chlorinated solvents (TCE, cis-1,2 DCE, TCA, etc) and aromatic hydrocarbons (BTEX). The selected remedy for the groundwater is Land Use Controls to prevent exposure, In Situ Chemical Oxidation for chlorinated hydrocarbons, Enhanced Natural Attenuation for aromatic hydrocarbons, and monitored natural attenuation (plume containment) for the dissolved plume. DTSC signed the Declaration page on 10/19/06 and forwarded signature page to Water Board who provided the final signature on 12/28/06.

Completed Area Name:	4/9 - South AFRL
Completed Sub Area Name:	Not reported
Completed Document Type:	Feasibility Study Report
Completed Date:	03/03/2006
Comments:	On March 3, 2006, DTSC concurred with the Final Focused Feasibility Study to support a Technical Impracticability Evaluation/ Containment Zone Application for the South Air Force Research Laboaratory (AFRL) in OU 4 and OU 9. Due to the presence of pure phase trichloroethene (TCE) and tetrachloroethene (PCE) in fractured bedrock at depths exceeding 250 feet, the Focused Feasibility Study recommends requesting a technical impracticability waiver for meeting the cleanup standard of the Maximum Contaminant Level for drinking water (MCL) and applies for a Containment Zone under the State Water Code.

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Not reported
Completed Document Type: Record of Decision
Completed Date: 08/04/2009
Comments: This ROD documents the cleanup action for groundwater for Sites 5, 14, 76, and 86; and the soil cleanup action for Site 29. The remedy to clean up groundwater at combined Sites 5 and 14 is the implementation of in-situ biotreatment to destroy floating free product, injection of chemical reagents to remediate dissolved chlorinated solvents, the continued operation of the Site 14 extraction/treatment system, and the implementation of Land Use Controls to limit potential human exposure. The remedy to clean up groundwater at Sites 76 and 86 is to inject chemical reagents and in-situ biological components, and implement LUCs to limit potential human exposure. The remedy to clean up soil at Site 29 is to remove surface debris, grade the site and install a cover which will contain a soil erosion stabilizer agent, enhance the stormwater management system, install fencing, and implement LUCs. Groundwater monitoring will be performed in perpetuity or until sites are cleaned. DTSC signed the ROD on 7/8/09.

Completed Area Name: 426
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 08/06/2004
Comments: RA - S426 -- No Further Action recommendation following the completion of a removal action at Site 426 in OU-7, documented in the Site Interim Removal Action Report, March 2004. Site 426 is an historic WWII Chemical Warfare Material Storage Yard near dormitories where investigation delineated four possible "trenches." An excavation removal action conducted in 2002 identified no hazardous contaminants, only four sets of concrete "rails" which were removed.

Completed Area Name: 4/9 - South AFRL
Completed Sub Area Name: Not reported
Completed Document Type: Record of Decision
Completed Date: 09/26/2007
Comments: Selected Remedy included a waiver of the Drinking Water Cleanup Standard and implementation of land use controls and a "Containment Zone." High Concentrations of TCE and PCE exist in fractured bedrock. Feasibility Study justified a technical impracticability waiver for aquifer clean up. Soil and Groundwater will have land use controls and will be monitored to ensure contaiminants do not migrate past the "Containment Zone." Final ROD document delivered 9/5/2007. Approval signatures from Air Force, USEPA, DTSC, and RWQCB provided on 9/11, 9/24, 9/26, and 10/1/2007 respectively.

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Not reported
Completed Document Type: Feasibility Study Report
Completed Date: 10/21/2008
Comments: DTSC has concurred with finalizing the FS allowing OU 1 to move to the Proposed Plan stage. Thirty six of the 48 sites have been categorized as "No Further Action" either because contamination was not found or the contamination was petroleum-only (which moves these sites to the jurisdiction of the Kern County Health Dept under RWQCB authority). Site 45 has been sufficiently remediated and assigned

EDWARDS AIR FORCE BASE (Continued) **1000155217**

NFA. As only VOCs are contaminants of concern, the remaining 11 sites have been grouped into the "North Plume/Site 19 Plume", the "South Plume" and the "Site 44 Plume". Remedial alternatives were designed around the remediation of these three plumes.

Completed Area Name: 6 - Operable Unit 6, NASA Dryden
Completed Sub Area Name: Not reported
Completed Document Type: Feasibility Study Report
Completed Date: 10/15/2004
Comments: This FS summarizes the backgrounds, plume characteristics, and remedial action alternatives evaluated for sites recommended for remedial action within Operable Unit 6 (OU-6). The report includes preliminary cleanup goals, technical approach comparisons, and cost comparisons of applicable remedial alternatives. Sites in OU-6 are not currently used for residential purposes, nor is such use anticipated; therefore, the FS focuses on industrial use considerations. The preferred alternative recommended for the Proposed Plan is Source Control and Hydrologic Control with Groundwater Monitoring.

Completed Area Name: OU-3 Basewide Homestead Wells
Completed Sub Area Name: Not reported
Completed Document Type: Record of Decision
Completed Date: 11/06/2003
Comments: RAP - OU3 -- The U.S. Environmental Protection Agency, the U.S. Air Force, and the State of California have selected No-Action as the remedy for Edwards AFB Operable Unit (OU)3. OU3 is defined as the basewide water wells and originally include 660 potential well sites determined from historical records and archival research. Initial site investigations determined that eight of the 660 wells were suspected as potential contaminant pathways to groundwater and were retained in OU3 for further evaluation. Subsequent investigations determined that none of the eight wells retained in OU3 had contributed to any groundwater contamination and, furthermore, no soil contamination was found in the vicinity of any of the wells.

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: S172
Completed Document Type: Operations and Maintenance Report
Completed Date: 06/30/2003
Comments: OM - S172 -- In January 2000, the Air Force implemented an interim removal action (IRA) consisting of soil vapor extraction (SVE) at Site 172, the outdoor waste sump at Building 8595 in Operable Uit 4, Air Force Research Laboratory. The primary objective of the IRA at Site 172 is to remove contaminant mass and reduce the further migration of volatile organic compounds (VOCs) from contaminated soil into the Site 37 groundwater plume. The SVE system operated with one well initially; two more wells were added in August 2000. Four additional extraction wells were connected to the system, which was brought on line September 12, 2002, extracting vapor from seven wells. The cumulative mass of contaminants removed during the reporting period was 472 pounds. Vapor flow rates averaged approximately 42 standard cubic feet per minute (scfm) during January to August 2002, and 84 scfm during September to December 2002 following expansion of the well field from three to seven wells. The SVE operating cost for the year 2002, excluding labor, was $95,172.

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Completed Area Name: 4A - AFRL Area
Completed Sub Area Name: Site 133
Completed Document Type: Removal Action Completion Report
Completed Date: 06/27/2003
Comments: RA - S133 -- Construction of the Groundwater Exttraction Treatment System was completed between 01/09 and 04/18/2001 with testing of the system during the week of 04/23/2001 and startup on 04/30/2001. The system includes three groundwater extraction wells and an aboveground treatment system that uses liquid-phase granular activated carbon to remove volatile organic compounds (VOCs) in the extracted groundwater prior to discharge to the Air Force Research Laboratory (AFRL) sewage treatment plant. The system is designed for a maximum capacity of 50 gallons per minute (gpm); however, the volume of water extracted is limited by a discharge permit to 20 gpm.

Completed Area Name: 8 - 25 Operable Unit - 8 - Site 25 Exotic Fuels
Completed Sub Area Name: Site 25
Completed Document Type: Removal Action Completion Report
Completed Date: 05/13/2003
Comments: RA - STE25 -- This report summarizes the operational maintenance and system sampling data collected during the period from December 28, 2001 through July 1, 2002 for the Site 25 Groundwater Extraction and Treatment System (GETS), in Operable Unit No. 8. During the reporting period, approximately 4,483,000 gallons of groundwater were extracted and treated by the Site 25 GETS at an average folwrate of 19.9 gallons per minute. 20.5 pounds (lbs.) of trichloroethene (TCE) were removed from treated groundwater. As of July 1, 2002, the GETS removed a cumulative total of 28.7. lbs. of TCE from treated groundwater. The treatment system effluent is discharged to the base sanitary sewer under an industrial wastewater discharge permit issued by Edwards Air Force Base (AFB).

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: PRL32
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 06/28/2002
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: PRL31
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 06/28/2002
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: PRL30
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 06/28/2002
Comments: PEA - PRL30 -- No Further Investigation (NFI) documents signed by the Edwards Air Force Base Remedial Project Managers for Operable Unit 7 - Basewide Miscellaneous Area of Concern (AOC) Number 400. The NFI determination for this site-specific action means that the AOC has been adequately investigated and that the results justify the determination. PEA - PRL31 -- No Futher Investigation (NFI) documents signed by the Edwards Air Force Base Remedial Project Managers for Operable Unit 1 - Main Base Flight Line Site Number 65. The NFI determination for this site-specific action means that the Site has

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been adequately investigated and that the results justify the determination. PEA - PRL32 -- No Further Investigation (NFI) documents signed by the Edwards Air Force Base Remedial Project Managers for Operable Unit 2 - Ould South Base Site Number 96. The NFI determination for this site-specific action means that this Site has been adequately investigated and that the results justify the determination.

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: PRL29
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 03/29/2002
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: PRL28
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 03/29/2002
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: PRL27
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 03/29/2002
Comments: PEA - PRL27 -- No Further Investigation (NFI) documents signed by the Edwards Air Force Base Remedial Project Manager for Operable Unit 4- Air Force Research Laboratory Site Number 146 and for Operable Unit 9 - East Air Force Research Laboratory Site Number 376. The NFI determination for these site-specific actions means that these Sites have been adequately investigated and that the results justify the determination. PEA - PRL28 -- No Further Investigation (NFI) documents signed by the Edwards Air Force Base Remedial Project Manager for Operable Unit 7 - Basewide Miscellaneous Site Number 353 and Area of Concern (AOC) Numbers 268,368 and 371. The NFI determination for these site-specific actions means that these Sites/AOCs have been adequately investigated and that the results justify the determination. PEA - PRL29 -- No Further Investigation (NFI) documents signed by the Edwards Air Force Base Remedial Project Manager for Operable Unit 4 - Air Force Research Laboratory Site Number 7 and 146, and Area of Concern (AOC) Number 167 and 174. The NFI determination for these site-specific actions means that these Sites/AOCs have been adequately investigated and that the results justify the determination.

Completed Area Name: 426
Completed Sub Area Name: Not reported
Completed Document Type: *Action Memorandum (if <$1M)
Completed Date: 10/11/2001
Comments: RAW - S426 -- RAP of Edwards Air Force Base operable unit 7, site 426, includes both the Engineering Evaluation/Cost Analysis and Action Memorandum. The selected remedy for the chemical warfare site is containment excavation.

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: PRL26
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 12/13/2001

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Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: PRL25
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 12/13/2001
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: PRL24
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 12/13/2001
Comments: PEA - PRL24 - Preliminary Endangerment Assessment (PEA) of Edwards Air Force Base, Operable Unit 4, sites 7 and 174 and area of concern 167, determined that these sites and of concern pose no environmental or Human Health Threat. This document administratively removes these sites from further investigation. PEA - PRL25 -- Preliminary Endangerment Assessment (PEA) Edwards Air Force Base, Operable Unit 7, Sites 295, 434, 435, 436 441 and area of concern 457, determined that these sites and area of concern pose no Environmental or Human Health Threat. This document administratively removes these sites from further investigation. PEA - PRL26 -- Preliminary Endangerment Assessment (PEA) Edwards Air Force Base, Operable Unit 9, Site 179, determined that this site poses no environmental or Human Health Threat. This document administratively removes this site from further investigation.

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: PRL23
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 09/17/2001
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: PRL22
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 09/17/2001
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: PRL21
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 09/17/2001
Comments: PEA - PRL21 -- Concurrence provided on PEA equivalent document for OU7, AOCs 261, 262, 263, 264, and 265. PEA - PRL22 -- Concurrence provided on PEA equivalent document for OU10, Site 279. PEA - PRL23 -- Concurrence provided on PEA equivalent document for OU2, AOCs 458, 459, and 460.

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: PRL20
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 06/11/2001
Comments: PEA - PRL20 -- Concurrence provided on PEA equivalent documents for OU-5 sites 229, 235, 236, 238, 348, and 349 and AOCs 187, 190-192, 230, 246, 251, 253, 281, 283, 287, 288, 403, 420 423.

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Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: PRL19
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 06/08/2001
Comments: PEA - PRL19 -- concurrence provided on PEA equivalent document for OU4, Site 186.

Completed Area Name: 8 - 25 Operable Unit - 8 - Site 25 Exotic Fuels
Completed Sub Area Name: Site 25
Completed Document Type: *Action Memorandum (if <$1M)
Completed Date: 12/04/2000
Comments: RAW - STE25 -- Concurrance on the proposed interim removal action to treat groundwater contaminated with tetrachloroethylene and N-Nitrosodimethylamine. Extracted groundwater will be treated by carbon absorption and discharged to EAFB's sanitary sewer.

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: PRL18
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 03/15/2001
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: PRL17
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 03/15/2001
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: PRL16
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 03/15/2001
Comments: PEA - PRL16 -- Concurrence provided on PEA equivalent documents for Operable Unit #4, Site 150 and Area of Concern 168. PEA - PRL17 -- Concurrence provided on PEA equivalent documents for Operable Unit #7 Sites 4 and 34 and Areas of Concern 388 and 394. PEA - PRL18 -- Concurrence provided on PEA equivalent documents for Operable Unit #8,Site 2.

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: PRL15
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 02/07/2001
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: PRL14
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 02/07/2001
Comments: PEA - PRL14 -- Concurrence provided on PEA equivalent documents for Operable Unit #10, Area of Concern 243. PEA - PRL15 -- Concurrence provided on PEA equivalent documents for Operable Unit #1, Sites 46, 55 and 366.

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: PRL13
Completed Document Type: Preliminary Endangerment Assessment Report

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Completed Date: 02/08/2001
Comments: PEA - PRL13 -- Concurrence provided on PEA equivalent documents for Operable Unit #4, Site 12 and Areas of Concern 121, 155 and 164.

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: STE18
Completed Document Type: * Remedial or Removal Design
Completed Date: 08/02/1999
Comments: DES - STE18 -- Approval of dual extraction system design for interim removal action to treat TCE contaminated soil and groundwater.

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: PRL12
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 04/21/2000
Comments: PEA -- Concurrance provided on PEA equivalent documents for OU-3, sites 30,412,413,414, and 415.

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: PRL11
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 01/05/2000
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: PRL10
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 01/05/2000
Comments: PEA - PRL10 -- Concurrance provided on PEA equivalent documents for OU-4, areas of concern 122, 141, 170, and 171. PEA - PRL11 -- Concurrance provided on PEA equivalent document for OU-5, area of concern 233.

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: PRL9
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 09/29/1999
Comments: PEA - PRL9 -- Concurrence provided on PEA equivalent documents for OU-2, Sites 105, 109, 111, and 364.

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: PRL8
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 09/29/1999
Comments: PEA - PRL8 -- Concurrence provided on PEA equivalent documents for OU-3, Sites 409, 410, 411, and 416.

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: PRL7
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 02/26/1999
Comments: PEA - PRL7 -- Concurrance provided on PEA - equivalent documents for OU-10 sites 228, 232, and 256.

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: S223
Completed Document Type: * Remedial or Removal Design

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Completed Date: 02/02/1999
Comments: DES - S223 -- Design for installing, operating and evaluating the SVE and air sparging systems at Site 223 in OU-2.

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: SIT14
Completed Document Type: * Remedial or Removal Design
Completed Date: 02/01/1999
Comments: DES - SIT14 -- Design for installing, operating, and evaluating the groundwater extraction and treatment system at Site 14 in OU-2.

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: B8595
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 01/28/1999
Comments: PEA - B8595 -- Investigation and closure of AOC's 170-172 in Building 8595 in OU-4.

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: PRL6
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 10/01/1998
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: SRAM
Completed Document Type: Removal Action Completion Report
Completed Date: 08/03/1998
Comments: RA - SRAM -- Time critical removal action taken to destroy short range attack missile motor.

Completed Area Name: 6 - Operable Unit 6, NASA Dryden
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Plan
Completed Date: 04/27/1999
Comments: OM - OU-6 -- APPROVAL OF THE O&M PLAN FOR OU-6 SITES, N2, N3 AND N7.

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: S133
Completed Document Type: *Action Memorandum (if <$1M)
Completed Date: 10/17/2000
Comments: RAW - S133 -- The proposed Interim Removal Action consists of the extraction of groundwater contaminated with solvents, primarily trichloroethlyene, and treatment by liquid phase granular activated carbon. Treated effluent will be discharged to the Base's sanitary sewer system. A total of 43,200 gallons per day of groundwater will be extracted and treated.

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: PRL5
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 10/01/1998
Comments: PEA - PRL5 -- EAFB has adequately investigated the OU-5 NASA Jet Propulsion laboratory PRL Sites 195, 200, 201, 243, 289 and 350 (collectively, PRL5). DTSC finds that the documents are equivalent to a PEA document. PEA - PRL6 -- EAFB has adequately investigated the OU-2 Old South Base PRL Sites 75, 77, 89, 95, 97 and 99

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(collectively, PRL6). DTSC finds that the documents are equivalent to a PEA document.

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: PRL4
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 07/29/1998
Comments: PEA - PRL4 -- Edwards AFB has adequately investigated the OU-2 Old South Base PRL sites 72, 73, 78, 79, 84, 87, 98, 100, 101, 104, 290, 291 and 417 (collectively, PRL4) DTSC finds that the documents are equivalent to a PEA document.

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: PRL1
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 12/12/1996
Comments: Not reported

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: S223
Completed Document Type: Removal Action Completion Report
Completed Date: 06/01/1999
Comments: RA - S223 -- Implementation of a SVE/Air sparging system to remediate fuel contaminated soil and groundwater.

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 14
Completed Document Type: Removal Action Completion Report
Completed Date: 06/11/1999
Comments: RA - SIT14 -- Implementation of a GW extraction/treatment system to remediate TCE contaminated GW. System implemented consists of 4 extraction wells and an above ground treatment system using carbon adsorption.

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: SIT29
Completed Document Type: Removal Action Completion Report
Completed Date: 06/04/1998
Comments: RA - SIT29-- Removal action consisted of fencing the site for access restriction and conducting long - term groundwater monitoring.

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: S223
Completed Document Type: *Action Memorandum (if <$1M)
Completed Date: 05/07/1998
Comments: RAW - Site 223 -- Petroleum hydrocarbon contamination in soil and groundwater will be treated using soil vapor extraction/vapor treatment for soils and air sparging for groundwater. Monitoring of the system will also be required.

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: SIT14
Completed Document Type: *Action Memorandum (if <$1M)
Completed Date: 05/07/1998
Comments: RAW - SITE14 -- Groundwater at Site 14 contaminated with petroleum hydrocarbon, volatile organics, and semi-volatile organcis will be treated via extraction and treatment by liquid-phase granular

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activated carbon adsoption, then reinjected into the groundwater aquifer

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: SIT29
Completed Document Type: *Action Memorandum (if <$1M)
Completed Date: 05/07/1998
Comments: RAW - SIT29 -- The South Base abandoned landfill has been fenced and will be monitored.

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Not reported
Completed Document Type: Feasibility Study Report
Completed Date: 02/09/2006
Comments: The FS evaluated alternatives for each site in Operable Unit 2 - South Base. The preferred remedial alternatives for each site are summarized below: Sites 5/14 Contaminant Plume In-situ treatment of the commingled fuel and solvent contamination in groundwater with the maintenance of plume containment, long-term monitoring, and institutional controls. Pilot testing will be conducted to evaluate the appropriate method for in-situ treatment. Sites 76 and 86 Active groundwater restoration through the use of in-situ treatment and institutional controls for groundwater contaminated with trichloroethylene. Pilot testing will be conducted to evaluate the appropriate method for in-situ treatment. Site 29 Removal of recently emplaced surface debris, institutional controls, storm water controls, and long-term monitoring for the two former landfill areas. Site 69 Removal and on-base waste disposal of buried and surface debris from the Old South Base North Landfill. Excavated materials will be consolidated within the Main Base active landfill. Sites 81 and 102 Removal and off-site treatment or recycling for skeet target fragments from two former skeet ranges located in the Old South Base area.

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 5
Completed Document Type: Removal Action Completion Report
Completed Date: 12/10/1997
Comments: The Dual Extraction System at the source area of the Sites 5 and 14 plume is in place and operational. The system addresses "Hot Spot" soil and groundwater contamination from leaking USTs.

Completed Area Name: MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 06/30/1997
Comments: RA Site 7 & AOC 167. Beryllium soil contamination consolidated in an on-site waste management unit. Site is capped and revegetated and its location recorded in the Base Comprehensive Plan.

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Site 16
Completed Document Type: Removal Action Completion Report
Completed Date: 06/30/1997
Comments: SIT16 DES Removal Action Completion - Initial operation of the Dual Extraction System began on March 18, 1997. The system is considered to be fully operational for long term use. The DES is extracting soil

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vapor and groundwater contaminated with JP-4 from the Building 1820 JP-4 Fuel Spill.

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: SIT45
Completed Document Type: Removal Action Completion Report
Completed Date: 05/22/1997
Comments: Not reported

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 5
Completed Document Type: *Action Memorandum (if >$1M)
Completed Date: 06/30/1997
Comments: RAP, OU-2 Site 5/15 Source Area Action Memorandum. Dual Phase Extraction selected for VOC and Fuel contamination in soil and groundwater.

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: SIT18
Completed Document Type: Remedial Action Plan
Completed Date: 05/29/1997
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: SIT16
Completed Document Type: Remedial Action Plan
Completed Date: 09/30/1996
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: SIT45
Completed Document Type: Remedial Action Plan
Completed Date: 09/30/1996
Comments: Not reported

Completed Area Name: MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Plan
Completed Date: 09/30/1996
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Participation Plan / Community Relations Plan
Completed Date: 05/31/1994
Comments: PPP - DTSC approved a Public Participation Plan (revision) for Edwards Air Force Base.

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Site 16
Completed Document Type: Removal Action Completion Report
Completed Date: 01/30/1993
Comments: Not reported

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report

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Completed Date:	01/30/1993
Comments:	RA (OU1BV): Removal of JP-4 fuel in the vadose zone by injection of air underground to provide oxygen to native bacteria which feed on petroleum hydrocarbons. This process is being employed at Site 16 - Fuel Spill and at Site 21 - Jet Engine test cell facility. RA (OU1FP): Installation, development and activation of six scavenger pumps to remove free product from the groundwater surface at Site 16.
Completed Area Name:	1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name:	Not reported
Completed Document Type:	Removal Action Completion Report
Completed Date:	01/30/1992
Comments:	RA (OU1PR): Construction of a new JP-4 jet fuel pipeline to replace existing pipeline from fuel tank farm to flight line (4.5 miles) with double-walled pipe and leak detectors. No contaminated soil was removed with this action.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Public Participation Plan / Community Relations Plan
Completed Date:	04/30/1991
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Screening
Completed Date:	02/10/1987
Comments:	Site Screening Done.
Completed Area Name:	6 - Operable Unit 6, NASA Dryden
Completed Sub Area Name:	Not reported
Completed Document Type:	Proposed Plan
Completed Date:	06/01/2005
Comments:	No significant public comments received.
Completed Area Name:	1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name:	Site 58
Completed Document Type:	Removal Action Workplan
Completed Date:	03/25/2005
Comments:	This IRA Work plan includes additional characterization to delineate free product jet fuel and installation of a Vapor Extraction System to remediate soil and groundwater and removal of free product.
Completed Area Name:	4/9 - South AFRL
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Investigation Report
Completed Date:	06/23/2005
Comments:	Final approval letter sent.
Completed Area Name:	2 - Operable Unit 2, South Base
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Investigation Report
Completed Date:	11/09/2004
Comments:	Final RI Report
Completed Area Name:	7 - Operable Unit 7, Basewide Misc.
Completed Sub Area Name:	Site CWM-A

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Completed Document Type: Feasibility Study Report
Completed Date: 09/14/2007
Comments: Site 442 CWM concurrence letter sent 9/14/07.

Completed Area Name: 7 - Operable Unit 7, Basewide Misc.
Completed Sub Area Name: Site CWM-A
Completed Document Type: Remedial Investigation Report
Completed Date: 08/04/2006
Comments: Final Report received 7/10/2006. Originally 27 sites/AOCs. RPMs agreed that 24 sites and 2 AOCs posed minimal risk to human health and environment due to CWM-related contamination and were either NFA or administratively closed under CERCLA in the Site Inspection phase. DTSC concurrance on Final document by email 8/4/2006. Two sites, Site 426 and Site 442, to be carried forward.

Completed Area Name: 7 - Operable Unit 7, Basewide Misc.
Completed Sub Area Name: Site CWM-A
Completed Document Type: Proposed Plan
Completed Date: 05/01/2008
Comments: Final version received 5/1/2008. Public comment period ended 6/16/2008.

Completed Area Name: 7 - Operable Unit 7, Basewide Misc.
Completed Sub Area Name: Site CWM-A
Completed Document Type: Record of Decision
Completed Date: 09/25/2009
Comments: This ROD is for the Chemical Warfare Materiel Operable Unit, where miscellaneous former chemical warfare materials were buried in several waste cells at Sites 442-1, -2, and -3. Chemical wastes are not thought to be present in these waste cells, but as a safety precaution, no invasive sampling was performed. Furthermore, the suspected materials are believed to have degraded since disposal. However, as a precaution, a protective remedy was selected. The selected remedy includes grading to redirect surface drainage to limit infiltration, an envirotranspiration surface cap, long term monitoring and land use controls. This ROD also selects "No Further Action" for Site 426 which was once thought to contain chemical warfare materials.

Completed Area Name: 5/10 - Operable Units 5 and 10, North Base
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 10/22/2008
Comments: DTSC concurrence on "Final" Operable Unit 5/10 RI Summary Report. 87 sites were identified within OU 5/10, the sites were classified into the following categories: 35 sites were removed from the CERCLA process as requiring No Further Investigation following the PA/SI phase; 15 sites were removed from the CERCLA process on the condition that contaminated soil or groundwater be addressed as part of remedial actions for Site 282 or 285; 23 sites were removed from the CERCLA process as petroleum only sites. Fourteen sites (Sites 1, 231, 233, 239, 240, 242, 274, 275, 278, 279[soil only], 282[groundwater only], 285, 287[groundwater only], and 422[groundwater only]) were evaluated in this document and will continue on through the FS.

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Not reported

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Completed Document Type: Proposed Plan
Completed Date: 06/28/2006
Comments: DTSC concurred with the OU2 Proposed Plan concurrence letter. Air Force proposes the following remedies for groundwater at Sites 5, 14, 76, and 86; soil and debris at sites 29, 29, 69, 81, and 102; and NFA remedies at the last four sites, Sites 78, 79, 96, and Area of Concern (AOC) 417

Completed Area Name: 4A - AFRL Area
Completed Sub Area Name: Not reported
Completed Document Type: Feasibility Study Report
Completed Date: 10/25/2006
Comments: DTSC concurrence with the OU-4/9 Soil and Debris Sites Feasibility Study Report. Preferred remedial alternatives include: Site 36 - Land Use Controls only (vehicle gate, warning signs, and land use restrictions. Site 312 - clean closure of the site to residential use standards, off-site disposal of excavated soil and concrete. Site 318 - Land Use Controls. Sites 6 and 113 - Expand existing LUCs and install additional fencing. Site 115 - expand existing LUCs and backfill silos with clean soil and cap with concrete.

Completed Area Name: 4/9 - South AFRL
Completed Sub Area Name: Not reported
Completed Document Type: Proposed Plan
Completed Date: 03/28/2006
Comments: EPA and DTSC concurred with final version of the OU-4 AFRL Proposed Plan.

Completed Area Name: 4A - AFRL Area
Completed Sub Area Name: Not reported
Completed Document Type: Proposed Plan
Completed Date: 08/03/2007
Comments: Final document concurrence letter sent 8/3/07. No Further Action proposed for Sites 7, 26, 150, 153, 166, 172, 329, and 396, AOCs 170 and 171. Actions required for Sites 13, 36, 167, 312, 318, 6 and 113, and 115. Actions include continued groundwater monitoring, fencing, LUCs to prohibit residential uses and restrict industrial/construction uses.

Completed Area Name: 4/9 - Soil and Debris Sites
Completed Sub Area Name: Not reported
Completed Document Type: Record of Decision
Completed Date: 09/04/2008
Comments: Final ROD addresses the soil and debris media at 16 sites and two areas of concern (AOCs) located within OUs 4 and 9 and also the groundwater medium at Sites 6 and 113. Further Action required for the following sites: OU4 (Sites 13, 36, 167, 312, and 318), OU9 (Sites 6, 113, and 115). Interim remedial actions have reduced formerly high contaminant concentrations to levels acceptable for unrestricted use at Sites or AOCs 7, 26, 153, 166, 170, 171, 172, and 396. These sites will be Certified. No further action determinations were made for Sites 150 and 329 where contaminants were below unrestricted use levels.

Completed Area Name: 4A - AFRL Arroyos
Completed Sub Area Name: Not reported
Completed Document Type: Feasibility Study Report

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Completed Date: 01/15/2009
Comments: This Focused Feasibility Study supports a technical impracticability (TI) evaluation and designation of a containment zone (CZ) for groundwater plumes at Sites 162 and 461 at the Air Force Research Lab, Edwards AFB. Chemicals of Concern are present in fractured bedrock at levels that pose an unacceptable risk to human health and the environment, however this FS concludes that it is impracticable to remove the COCs and recommends measures to prevent exposure to contaminated soil and groundwater.

Completed Area Name: 9 - Air Force Research Lab - East
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 02/08/2006
Comments: DTSC concurrence with Final document, no letter sent. Of the 46 original sites in OU-9, 36 sites have been excluded from the CERCLA process and the 10 remaining sites are recommended for remedial action. 29 Sites were recommended for NFA in the Site Inspection Phase, 6 are managed under the UST program, and 1 site remains active. The 10 remaining sites include: Sites 6 and 113 (Abandoned Mine Shafts used for propellant waste disposal) contain waste left in place that is unsafe to investigate, and eight groundwater plumes at sites 27, 115, 116, 125, 127, 178, 321, and 325.

Completed Area Name: 8 - Operable Unit 8, Northwest Main Base
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 06/07/2006
Comments: DTSC concurred with RI Summary Report. Site Inspection phase eliminated nine sites from the CERCLA process as NFA. Eight sites are recommended for Feasibility Study.

Completed Area Name: 4/9 - South AFRL
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan
Completed Date: 04/03/2009
Comments: This document presents the work to be peformed to monitor the remedies presented in the OUs 4/9 South AFRL Record of Decision. DTSC worked closely with the document development; all of DTSC concerns have been addressed.

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 5
Completed Document Type: Monitoring Report
Completed Date: 04/17/2006
Comments: DTSC concurred with annual monitoring report and recommendations for continued operation.

Completed Area Name: 5/10 - Operable Units 5 and 10, North Base
Completed Sub Area Name: Site 285
Completed Document Type: Monitoring Report
Completed Date: 03/17/2006
Comments: Concur with Recommendation to continue operation and monitoring.

Completed Area Name: 4A - AFRL Area
Completed Sub Area Name: Site 312
Completed Document Type: Remedial Investigation Workplan

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Completed Date: 04/17/2006
Comments: DTSC concurred with workplan.

Completed Area Name: 4A - AFRL Area
Completed Sub Area Name: Site 37
Completed Document Type: Treatability Study Report
Completed Date: 04/17/2006
Comments: DTSC final concur letter.

Completed Area Name: 9 - Air Force Research Lab - East
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/21/2005
Comments: DTSC concurred without comment

Completed Area Name: 7 - Operable Unit 7, Basewide Misc.
Completed Sub Area Name: Site 272
Completed Document Type: Remedial Investigation Workplan
Completed Date: 07/13/2006
Comments: Document not reviewed by DTSC. Work proceeded without DTSC comments.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Base / Site Management Plan
Completed Date: 03/28/2006
Comments: December 2005 Submittal of July-Sept. 2005 Strategy and Status Report

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Site 66
Completed Document Type: Removal Action Completion Report
Completed Date: 04/26/2006
Comments: DTSC concurred with final Site 66 Treatability Study Report for the Dual Extraction System without comment. SVE System removed 114907 lbs of hydrocarbons before being shut down in February 2005. 4017 lbs were removed during Pilot from vapor and free product.

Completed Area Name: 4A - AFRL Area
Completed Sub Area Name: Site 36
Completed Document Type: Removal Action Completion Report
Completed Date: 05/15/2005
Comments: The former Wastewater Holding Tank and piping, Building 8525 were removed in Aug. 2004. Approximatley 10 cubic yards of perchlorate contaminated soil was removed from beneath the tank for off-site disposal. Residual perchlorate is the only constituent of concern in the soil. Groundwater contains TCE, PCE, DCE, NDMA, and perchlorate. The groundwater will be managed under the OU-4/9 AFRL Arroyos area and Site 162.

Completed Area Name: 4A - AFRL Arroyos
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 08/03/2007
Comments: Final document concurrence letter sent 8/3/07.

Completed Area Name: 4A - AFRL Area
Completed Sub Area Name: Site 37
Completed Document Type: Removal Action Completion Report

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Completed Date:	05/01/2000
Comments:	Construction complete for the Groundwater Extraction and Treatement System (GETS) at Site 37. Primary Chemical of Concern is PCE. Extraction system began operation on 1/25/1999, and consists of groundwater extraction, liquid phase GAC, and discharge to the sewer.
Completed Area Name:	6 - Operable Unit 6, NASA Dryden
Completed Sub Area Name:	Not reported
Completed Document Type:	Design/Implementation Workplan
Completed Date:	02/16/2008
Comments:	DTSC concured with Final Remedial Action Phase 2 Work Plan for OU 6 and finds it acceptable for the Remedial Design to implement Phase 2 of the Remedial Action selected by the September 2006 Record of Decision for Edwards AFB OU 6
Completed Area Name:	6 - Operable Unit 6, NASA Dryden
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedy Constructed: Operating Properly & Successfully
Completed Date:	04/24/2009
Comments:	This report documents the first part of Phase II of the implementation of the groundwater cleanup remedy. Phase I was the implementation of a managed Land Use Control program. Phase II comprises the injection and monitoring of chemical oxidants into groundwater. Results are encouraging as VOCs were reduced in portions of the plume. Follow-up injection/monitoring will be performed later in 2009.
Completed Area Name:	2 - Operable Unit 2, South Base
Completed Sub Area Name:	Not reported
Completed Document Type:	Public Notice
Completed Date:	09/19/2006
Comments:	Public comment period for OU 2 Proposed Plan.
Completed Area Name:	4A - AFRL Arroyos
Completed Sub Area Name:	Not reported
Completed Document Type:	Monitoring Report
Completed Date:	08/03/2007
Comments:	Final document concurrence letter sent 8/3/07.
Completed Area Name:	5/10 - Operable Units 5 and 10, North Base
Completed Sub Area Name:	Not reported
Completed Document Type:	Risk Assessment Report
Completed Date:	08/03/2007
Comments:	The Final OU 5/10 North Base Human Health Risk Assessment document was received by DTSC on 5/9/2007, after resolution of comments submitted by DTSC's risk assessor. Of the 14 sites carried forward into the RI phase and evaluated in this document, 12 sites exceeded the residential scenario benchmarks of 1 x 10-6 cancer risk or a noncancer Hazard Index of 1.
Completed Area Name:	Military Munitions Response Program (MMRP) - Basewide
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Assessment/Site Inspection Report (PA/SI)
Completed Date:	08/03/2007
Comments:	Phase I Report recommends further investigation for 14 areas: AL 500 - Main Base Closed Range, AL 501 - South Base Ordnance Ranges, North and South; AL 502 - North Base Ordnance Ranges, North and South; AL

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503 - Gates Range Areas, North, South, and West; AL 504, 7th AAF Bombing and Gunnery Range; AL 505, Edwards Off-Base Adjacent Areas 1, 2, 3, 4, and 5.

Completed Area Name: 7 - Operable Unit 7, Basewide Misc.
Completed Sub Area Name: Site 3
Completed Document Type: Feasibility Study Report
Completed Date: 10/02/2008
Comments: DTSC accepted the final Site 3 Main Base Inactive Landfill FS. Four alternative were evaluated with combinations of Land Use Controls, Monitored Natural Attenuation, Evapotranspirative Cover, Stormwater Control, and Waste Consolidation.

Completed Area Name: 5/10 - Operable Units 5 and 10, North Base
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Report
Completed Date: 04/30/2008
Comments: Concurrence on Final document delayed due to workload and higher priority document reviews by DTSC and Fish and Game.

Completed Area Name: 7 - Operable Unit 7, Basewide Misc.
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Report
Completed Date: 04/30/2008
Comments: Concurrence on Final version of document delayed due to heavy workload and higher priority document reviews by DTSC and Fish and Game.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Inventory Project Report (INPR)
Completed Date: 06/05/1990
Comments: Not reported

Completed Area Name: 4/9 - South AFRL
Completed Sub Area Name: Not reported
Completed Document Type: Pilot Study/Treatability Workplan
Completed Date: 11/20/2008
Comments: This addendum to the OUs 4/9 Workplan provides a summary of information to-date and outlines additional work to be performed for the bioremediation pilot study for the cleanup of plumes in the Arroyos portion of the South AFRL at EAFB.

Completed Area Name: 5/10 - Operable Units 5 and 10, North Base
Completed Sub Area Name: Site 282
Completed Document Type: Treatability Study Workplan
Completed Date: 01/06/2009
Comments: Comments to Draft Workplan rec'd 8/20/08 were provided on 9/20/08. The Final workplan was received 11/6/08 and approved on 1/6/09.

Completed Area Name: 5/10 - Operable Units 5 and 10, North Base - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Report
Completed Date: 01/16/2009
Comments: This document is the first phase ecological screening evaluation of the sites listed in the title. Site 233, and AOCs 284 and 287 have moved on to the next phase of evaluation while the remaining sites

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are considered no action for ecological issues.

Completed Area Name: 7 - Operable Unit 7, Basewide Misc.
Completed Sub Area Name: Site 3
Completed Document Type: Proposed Plan
Completed Date: 01/25/2010
Comments: This is the proposed plan for the Air Force's proposed remedy for Site 3 in OU 7. The Air Force proposes a remedy that includes consolidation of some of the landfill cells, capping the cells using an "evapotranspiration cover", and conducting monitored attenuation monitoring. Additionally, land use covenents will be applied to the site.

Completed Area Name: 4A - AFRL Arroyos
Completed Sub Area Name: Not reported
Completed Document Type: Proposed Plan
Completed Date: 09/23/2009
Comments: Document summarizes the investigation/feasibility study, and proposes the clean up remedy of the TCE/perchlorate/other VOC groundwater contamination at the Arroyos which is in OUs 4/9 along the northwestern side of the Edwards Air Force Research Laboratory. The proposed remedy is to apply a "Containment Zone" of the contaminated aquifer and if applicable, in the distant future institute active remediation if/when the plume(s) reach the alluvial aquifer.

Completed Area Name: 7 - Operable Unit 7, Basewide Misc.
Completed Sub Area Name: Site 3
Completed Document Type: Well Installation Workplan
Completed Date: 01/29/2009
Comments: This document provides the details for addressing data gaps identified in the FS. Work to be performed includes the installation of downgradient monitoring wells, and landfill soil gas monitoring wells. Draft final and comment resolution handled electronically. DTSC concurred with the final changes; all comments have been addressed. No final concurrence letter needed or sent.

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Site 16
Completed Document Type: Well Decommissioning Workplan
Completed Date: 02/04/2009
Comments: Document presents the results of the 2007-2008 annual monitoring of the Site 16 (OU 1) SVE system. DTSC comments on the draft were adequately addressed. No concurrence letter on the final document needed or sent.

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Site 19
Completed Document Type: Treatability Study Report
Completed Date: 01/02/2009
Comments: Documents the status of the Site 19 Bioremediation Treatment Study.

Completed Area Name: 5/10 - Operable Units 5 and 10, North Base - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Report
Completed Date: 04/02/2009
Comments: This document presents the ecological risk assessments for Sites 233 and 284. DTSC and DFG concurs.

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Completed Area Name:	5/10 - Operable Units 5 and 10, North Base - MULTIPLE SITES
Completed Sub Area Name:	Not reported
Completed Document Type:	Risk Assessment Report
Completed Date:	04/02/2009
Comments:	The ecological risk assessment for Site 233, AOC 284, and AOC 287 have been reviewed and accepted by DTSC and DFG. No formal concurrence letter needed or sent.
Completed Area Name:	4/9 - South AFRL
Completed Sub Area Name:	Not reported
Completed Document Type:	Monitoring Report
Completed Date:	02/02/2009
Comments:	Document provides the results of the 2007-2008 annual groundwater monitoring perfomred at the AFRL (OUs 4/9. All of DTSC comments on the draft document were addressed; no concurrence letter on the final needed or sent.
Completed Area Name:	5/10 - Operable Units 5 and 10, North Base
Completed Sub Area Name:	Site 285
Completed Document Type:	Monitoring Report
Completed Date:	01/21/2009
Comments:	This document presents the results of the 2007-2009 annual groundwater monitoring and groundwater extraction system performance for site 285 at Operable Units 5 and 10. DTSC has reviewed and concurs with the final document; no concurrence letter needed or sent. Not reported
Completed Area Name:	5/10 - Operable Units 5 and 10, North Base
Completed Sub Area Name:	Not reported
Completed Document Type:	Monitoring Report
Completed Date:	02/09/2009
Comments:	Report provides the results of the annual groundwater monitoring for Operable Units 5 & 10 at EAFB. No final concurrence letter required or sent.
Completed Area Name:	1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name:	Not reported
Completed Document Type:	Design/Implementation Workplan
Completed Date:	02/25/2009
Comments:	This document presents a sampling plan for data the Air Force will use for designing the planned remedial systems at OU 1. The AF recognizes that without a signed ROD, the remedies have not yet been selected.
Completed Area Name:	5/10 - Operable Units 5 and 10, North Base - MULTIPLE SITES
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Investigation Workplan
Completed Date:	09/02/2009
Comments:	Documents the proposed installation of various monitoring wells at Sites 282, 285, and AOC 287 at OUs 5/10 at EAFB
Completed Area Name:	1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name:	Site 58
Completed Document Type:	Monitoring Report
Completed Date:	09/16/2009
Comments:	Not reported

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Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Site 16
Completed Document Type: Pilot Study/Treatability Workplan
Completed Date: 01/06/2010
Comments: This workplan is for the study of in-situ bioremediation groundwater treatment at Site 16.

Completed Area Name: 8 - 25 Operable Unit - 8 - Site 25 Exotic Fuels
Completed Sub Area Name: Site 25
Completed Document Type: Monitoring Report
Completed Date: 08/24/2009
Comments: This report presents the results of the December 2007 through November 2008 monitoring of the Site 25 Groundwater and Extraction Treatment System. This includes the monitoring of the VOC groundwater plume.

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Site 18
Completed Document Type: Monitoring Report
Completed Date: 06/09/2009
Comments: Documents the results of the annual monitoring of the Site 18 Dual Phase Extraction System. DTSC concurs, no concurrence letter required. Not reported

Completed Area Name: 4A - AFRL Area
Completed Sub Area Name: Site 172
Completed Document Type: Monitoring Report
Completed Date: 06/17/2009
Comments: This report presents the results of the 2008 soil vapor monitoring at Site 172

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Site 19
Completed Document Type: Well Completion Report
Completed Date: 06/10/2009
Comments: Report was issued as final. DTSC provided input via comment letter.

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 29
Completed Document Type: Monitoring Report
Completed Date: 09/10/2009
Comments: Not reported

Completed Area Name: 8 - 25 Operable Unit - 8 - Site 25 Exotic Fuels
Completed Sub Area Name: Site 25
Completed Document Type: Treatability Study Workplan
Completed Date: 12/07/2009
Comments: This document comprises the workplan to conduct a chem-ox treatability study at Site 25. Chemical oxidents will be leached into the subsurface via infiltration galleries in an attempt to assess the viability of using this method to reduce the amount of VOCs in groundwater. DTSC reviewed and concurred with the responses to DTSC comments on the draft document. There was no draft final issued; DTSC concurs with the final document.

Completed Area Name: 4/9 - Soil and Debris Sites
Completed Sub Area Name: Not reported

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Completed Document Type: Remedial Action Implementation Workplan
Completed Date: 10/08/2009
Comments: This Remedial Action Work Plan (RAWP) focuses on implementation of the remedial actions selected in the Soil and Debris Sites ROD. This RAWP outlines soil excavation, confirmation soil sampling, and/or groundwater well installation at Sites 13, 36, 167, 312, and 318. This RAWP also includes standard operating procedures in a Sampling and Analysis Plan and a Quality Assurance Project Plan (QAPP).

Completed Area Name: 6 - Operable Unit 6, NASA Dryden
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Implementation Workplan
Completed Date: 05/18/2010
Comments: This workplan outlines the installation of additional wells for the remedial action to clean up groundwater at Operable Unit 6.

Completed Area Name: 2 - Operable Unit 2, South Base - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/02/2009
Comments: Not reported

Completed Area Name: 2 - Operable Unit 2, South Base - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Pilot/Treatability Study Report
Completed Date: 11/03/2009
Comments: Report presents the results of the second phase of the In-Situ Chem Oxidation Treatability Study and the 2008 groundwater monitoring program. Chem ox treatment is reducing VOC concentrations in groundwater. More applications are forthcoming.

Completed Area Name: 8 - Operable Unit 8, Northwest Main Base - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Well Installation Workplan
Completed Date: 08/30/2010
Comments: Workplan for obtaining background levels for arsenic and nitrate

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/25/2009
Comments: This is the comprehensive 2007 annual groundwater monitoring report for 2007. DTSC has concurred; no concurrence letter required.

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 76
Completed Document Type: Design/Implementation Workplan
Completed Date: 10/20/2010
Comments: Not reported

Completed Area Name: 7 - Operable Unit 7, Basewide Misc.
Completed Sub Area Name: Site 3
Completed Document Type: Feasibility Study Report
Completed Date: 01/07/2010
Comments: This documents the results of the data gaps investigation (additional monitoring wells and groundwater and soil gas (via previously installed permanent vapor wells)sampling to support the FS. Also

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included was an update to the VOC degradation study and a greater level of details on cleanup alternative cost estimates than was provided in the FS. At DTSC concurrence, no draft final was prepared and instead the Air Force worked with DTSC to address all of DTSC comments on the draft document.

Completed Area Name: 4/9 - South AFRL
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 10/12/2009
Comments: This report documents the installation and initial monitoring of wells for the South AFRL remedial action. DTSC has identified one potential issue (that of adequate downgradient control for Site 120) which will be addressed by the Air Force.

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 86
Completed Document Type: Remedial Action Implementation Workplan
Completed Date: 11/12/2010
Comments: Document presents the plan to perform the remedy (groundwater cleanup) at Site 86.

Completed Area Name: 5/10 - Operable Units 5 and 10, North Base
Completed Sub Area Name: Site 231
Completed Document Type: Engineering Evaluation / Cost Analysis - Time Critical
Completed Date: 05/10/2010
Comments: This EE/CA presents the case for conducting a Non-Time (subsequently changed to a "Time") Critical Removal Action for lead-contaminated soil at Site 231 in OU 5/10. It will be performed via a "scoop and haul" method with an Air Force goal of achieving a "no further action" designation for this site.

Completed Area Name: 5/10 - Operable Units 5 and 10, North Base
Completed Sub Area Name: Site 242
Completed Document Type: Engineering Evaluation / Cost Analysis - Time Critical
Completed Date: 05/11/2010
Comments: This EE/CA presents the case for conducting a Non-Time Critical Removal Action for PCB-contaminated soil at Site 242 in OU 5/10. It will be performed via a "scoop and haul" method with an Air Force goal of achieving a "no further action" designation for this site.

Completed Area Name: 5/10 - Operable Units 5 and 10, North Base
Completed Sub Area Name: Site 231
Completed Document Type: Other Report
Completed Date: 09/20/2011
Comments: This Action Memorandum provides the administratively required justification for completing the lead-impacted soil removal action at Site 231

Completed Area Name: 5/10 - Operable Units 5 and 10, North Base - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Well Installation Workplan
Completed Date: 04/28/2010
Comments: This workplan provides for the installation of monitoring wells at the referenced sites to fill data gaps for the Air Force to proceed to the Feasibility Study.

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Completed Area Name: 4/9 AFRL Misc. Documents
Completed Sub Area Name: Not reported
Completed Document Type: Well Completion Report
Completed Date: 03/01/2010
Comments: Report provides the results from the 2008 installation of monitoring wells forthe AFRL Arroyos and Northeast AFRL plumes. Additional wells are needed and a workplan to install these additional wells is under DTSC review.

Completed Area Name: 4/9 - South AFRL
Completed Sub Area Name: Not reported
Completed Document Type: Well Installation Workplan
Completed Date: 02/18/2010
Comments: Provides the Purpose, data quality objectives, and schedule for the next phase (referred to as the "Eco" phase)of wells to be installed at the South AFRL to monitor the plume extents and meet the ROD requirements.

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Not reported
Completed Document Type: Well Installation Workplan
Completed Date: 05/10/2010
Comments: This workplan is for the installation of monitoring wells to address selected data gaps for the groundwater plumes in OU 1. In April 2010 DTSC participated in a technical workgroup meeting to resolve comments and select final well locations.

Completed Area Name: 5/10 - Operable Units 5 and 10, North Base
Completed Sub Area Name: Site 285
Completed Document Type: Monitoring Report
Completed Date: 12/02/2009
Comments: This report summarizes the annual (04/08-04/09) operations and monitoring for Site 285 at OUs 5/10. DTSC did not review.

Completed Area Name: 4A - AFRL Area
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/22/2009
Comments: Report provides the results of the 2008 annual groundwater monitoring for the Arroyos, Northeast AFRL, and South AFRL at OUs 4/9

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 08/02/2010
Comments: Develops background groundwater concentrations for Nitrate, selected anions, and TDS.

Completed Area Name: 2 - Operable Unit 2, South Base - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Implementation Workplan
Completed Date: 10/06/2010
Comments: Workplan to initiate in-situ chemical oxidation of VOCs in groundwater at Sites 5 and 14 in Operable Unit 2.

Completed Area Name: 5/10 - Operable Units 5 and 10, North Base
Completed Sub Area Name: Not reported

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Completed Document Type: Monitoring Report
Completed Date: 01/19/2010
Comments: Provides the results of the August 2008-April 2009 Groundwater Monitoring Program for combined Operable Units 5 and 10.

Completed Area Name: Multiple OUs - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Well Installation Workplan
Completed Date: 05/18/2010
Comments: Workplan to install monitoring wells to address groundwater data gaps at the Northeast AFRL and a few of the Mars. Blvd. sites. Does not address all identified data gaps; there will be a future separate workplan for those data gaps.

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 01/26/2011
Comments: Workplan to assess the VIP at Sites 16 and 18.

Completed Area Name: 4A - AFRL Area
Completed Sub Area Name: Site 333A
Completed Document Type: Pilot/Treatability Study Report
Completed Date: 10/01/2010
Comments: Presents the results of the treatability study for groundwater at site 333. Injection of substrate resulted in degradation of primary contaminants to secondary contaminants (1,2-DCE) where degradation stalled even after bioaugmentation was applied. AF has agreed to continue monitoring to see if contaminant degradation continues.

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Site 58
Completed Document Type: Monitoring Report
Completed Date: 07/26/2010
Comments: Provides the results of the Nov '08 through Oct '09 SVE operations.

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 29
Completed Document Type: Other Report
Completed Date: 10/25/2010
Comments: This document presents the results of the surface debris removal and subsurface investigation to delineate the extent of and identify the general contents of the buried debris at Site 29. It was meant to feed into the remedial design. However, the results show that only limited innocuous (generally concrete, bottls, cans, etc.) are present. As a result, the Air Force turned this document into an FS addendum and added an evaluation of removing the buried debris.

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Site 18
Completed Document Type: Monitoring Report
Completed Date: 08/12/2010
Comments: Annual monitoring report for the OU 1, Site 18 Dual-phase extraction system for the remediation of VOCs in soil and groundwater.

Completed Area Name: 7 - Operable Unit 7, Basewide Misc.
Completed Sub Area Name: Site 3

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Completed Document Type: Record of Decision
Completed Date: 09/21/2012
Comments: After significant delay due to unacceptable changes made by the Air Force (AFCEE) in the draft final revision 1 and revision 2, and subsequent negotiation and modifications, the Federal Facility Agreement signatories agreed to finalize and sign the ROD in September 2012. This is a former municipal landfill that contains some (estimated to be small) amount of hazardous wastes that have resulted in a small VOC groundwater plume undergoing natural biodegradation. The remedy is to consolidate some of the more distant waste cells into a cell in the main portion of the landfill, apply land use controls restricting building on and in the vicinity of the landfill, conduct further studies of the bedrock aquifer, and monitor the continued degradation of the VOCs in groundwater.

Completed Area Name: Military Munitions Response Program (MMRP) - Basewide
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 05/15/2010
Comments: This report is the equivalent of a Remedial Investigation for military munitions for areas where the Air Force has identified as "closed" and no longer will be used for range operations. DTSC has reviewed and generally concurred with the results. In an August 2009 meeting, DTSC identified the need for further action in four areas.

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Site 58
Completed Document Type: Quality Assurance Workplan
Completed Date: 12/03/2010
Comments: Presents the workplan to install an SVE system at OU 1 Site 58.

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 14
Completed Document Type: Monitoring Report
Completed Date: 08/30/2010
Comments: DTSC reviewed the draft annual groundwater monitoring report, and no comments and concurred with finalization.

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 06/21/2010
Comments: This workplan describes the plan for collecting and analyzing soil samples in source areas at OU 1. The data will be used in developing potential remedial designs which will be finalized in the Record of Decision

Completed Area Name: 5/10 - Operable Units 5 and 10, North Base
Completed Sub Area Name: Site 282
Completed Document Type: Pilot/Treatability Study Report
Completed Date: 09/22/2010
Comments: Reports the status of the treatability study for groundwater at Site 282. DTSC disagrees with the conclusion that the process in not viable for treating groundwater at Site 282 and has conveyed this in a letter on the final document.

Completed Area Name: Multiple OUs - MULTIPLE SITES

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Completed Sub Area Name: Not reported
Completed Document Type: Treatability Study Report
Completed Date: 10/01/2010
Comments: Presents the results of the Treatability Study for GW contamination at Sites 162, 177, and 325. Study shows that these processess are technically feasible for contaminant clean up and they will be evaluated in the FS as part of remedy option evaluations.

Completed Area Name: 7 - Operable Unit 7, Basewide Misc.
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan
Completed Date: 11/10/2010
Comments: Provides the remedial design for the remedy for Site 442.

Completed Area Name: 4A - AFRL Arroyos
Completed Sub Area Name: Not reported
Completed Document Type: Well Installation Workplan
Completed Date: 08/09/2010
Comments: Workplan to install wells to address data gaps and provide data to support proposed remedy in the draft Arroyos ROD.

Completed Area Name: Military Munitions Response Program (MMRP) - Basewide
Completed Sub Area Name: Not reported
Completed Document Type: Engineering Evaluation / Cost Analysis - Time Critical
Completed Date: 08/19/2010
Comments: Finalized on 8/19/2010. Some sites will move to either an FS or will undergo removal actions via and Engineering Evaluation/Cost Analysis.

Completed Area Name: 5/10 - Operable Units 5 and 10, North Base
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/31/2010
Comments: This is the annual GW monitoring report for the period listed in the title. DTSC has concurred w/the final.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 07/19/2010
Comments: Work plan on strategy to determine basewide determination of nitrate, seltected anions, and TDS. No new field work proposed; will comprise the analyses of existing data. DTSC did not review; deferred review to the other regulatory agencies.

Completed Area Name: 2 - Operable Unit 2, South Base - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 03/05/2011
Comments: Documents the work to conduct an assessment of the presence of lead shot and skeet fragments at Sites 81 and 102

Completed Area Name: 2 - Operable Unit 2, South Base - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 03/05/2011
Comments: Presents the plan for conducting grid sieving of shallow soil to assess presence of skeet fragments and lead shot in soil at the two

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sites.

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 29
Completed Document Type: Removal Action Completion Report
Completed Date: 07/27/2010
Comments: This report documents the removal of 94,000 cubic yards of waste debris at Site 29 in Operable Unit 2. Wastes were segregated and either transported to recycling facilities or waste disposal facilities depending upon classification. Action will result in "clean closure" of this site.

Completed Area Name: 5/10 - Operable Units 5 and 10, North Base
Completed Sub Area Name: Site 285
Completed Document Type: Monitoring Report
Completed Date: 12/01/2010
Comments: Provides the 4/09-4/10 final report for the Site 285 Groundwater Extraction system

Completed Area Name: 5/10 - Operable Units 5 and 10, North Base
Completed Sub Area Name: Site 231
Completed Document Type: Site Characterization Workplan
Completed Date: 09/13/2010
Comments: Workplan to install collect shallow soil gas samples, soil samples, groundwater samples, and install wells for risk screening purposes and source characterization.

Completed Area Name: 8 - Operable Unit 8, Northwest Main Base - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/02/2011
Comments: Annual monitoring report for OU 8 sites

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 02/04/2011
Comments: Not reported

Completed Area Name: 4/9 AFRL Misc. Documents
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/14/2011
Comments: Presents the 2009 annual groundwater monitoring results at various AFRL sites.

Completed Area Name: 4/9 - South AFRL
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/07/2012
Comments: Provides the results of the vapor intrusion sampling and assessment of the South AFRL. There is potential indication of low risk to selected buildings. Because of the transitory nature of soil vapor in the subsurface, the Air Force will conduct an additional monitoring round for the next South AFRL Five Year Review. There is an approximate 5x10-6 risk to occupants of Building 8595. To mitigate, the Air Force has agreed to continue to operate the SVE system to

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"break" the vapor pathway to the building.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 02/18/2011
Comments: Presents the strategy for sampling wells to identify nitrate sources at Edwards AFB

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/19/2011
Comments: 2009 Annual Monitoring Results for OU 1

Completed Area Name: 4/9 - Soil and Debris Sites
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 07/01/2011
Comments: Provides the results of the remedial action for the OUs 4 & 9 Soil and Debris Sites ROD. Action is complete for Sites 36, 6, and 113, but per DTSC and EPA comments the AF has agreed that a ROD Amendment is needed for Site 312 as they were unable to remove all the PCB-impacted soil.

Completed Area Name: 4/9 - Northeast AFRL
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 04/08/2011
Comments: Workplan to conduct an aquifer test in the Northeast AFRL for assessing aquifer parameters for future modeling updates.

Completed Area Name: Military Munitions Response Program (MMRP) - Basewide
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 10/13/2010
Comments: Provides the Phase II MMRP investigation of various areas of the base. Conclusions are that several areas will be designated as "No Further Action" while additional areas (AL504, AL505-2), and AL505-4) will undergo Feasibility Study (with required data gaps work) or a removal action via the EE/CA process.

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 29
Completed Document Type: Proposed Plan
Completed Date: 01/18/2011
Comments: Proposed plan to explain the change in the remedy for Site 29. Plan now is to excavate for clean closure.

Completed Area Name: 7 - Operable Unit 7, Basewide Misc.
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Report
Completed Date: 12/20/2010
Comments: PERA for select OU 7 Sites at EAFB.

Completed Area Name: 7 - Operable Unit 7, Basewide Misc.
Completed Sub Area Name: Site 339

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Completed Document Type: Site Characterization Workplan
Completed Date: 12/20/2011
Comments: Workplan to fill data gaps at Site 339 so the site can move to the ROD stage.

Completed Area Name: 5/10 - Operable Units 5 and 10, North Base
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Workplan
Completed Date: 08/01/2011
Comments: Site Characterization and Plume Delineation Work Plan to fill data gaps at OUs 5/10 Sites 231, 240/241, 275, 282, 285, and 422.

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 04/01/1996
Comments: 1996 Operable Unit 1 RI Report. Note, there is a subsequent (2004) supplemental OU 1 RI report

Completed Area Name: 4/9 - Northeast AFRL
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 08/30/2014
Comments: Rather than send a letter on the final report, DTSC will provide any needed input in comments on the Draft Northeast AFRL FS as this modeling report is incorporated into the FS

Completed Area Name: 6 - Operable Unit 6, NASA Dryden
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 05/23/2011
Comments: Provides the results of the final phase of the groundwater remedy treatment. Information will be used in the pending 5-year review of the OU 6 ROD remedy.

Completed Area Name: 8 - 25 Operable Unit - 8 - Site 25 Exotic Fuels
Completed Sub Area Name: Site 25
Completed Document Type: Well Installation Workplan
Completed Date: 08/01/2011
Comments: Well installation and geophysics survey to fill data gaps for Feasibility Study.

Completed Area Name: 5/10 - Operable Units 5 and 10, North Base
Completed Sub Area Name: Site 231
Completed Document Type: Removal Action Completion Report
Completed Date: 08/01/2011
Comments: Documents the results of the (mostly lead) soil contamination cleanup of Site 231 at OUs 5/10

Completed Area Name: Military Munitions Response Program (MMRP) - Basewide
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Workplan
Completed Date: 02/10/2012
Comments: Workplan to conduct a surface clearance of military munitions for 2 offsite areas adjacent to the base and one-site area at EAFB.

Completed Area Name: 4/9 - Soil and Debris Sites

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Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 06/01/1995
Comments: Presents the background levels for various inorganics in soil and bedrock at the AFRL area.

Completed Area Name: 5/10 - Operable Units 5 and 10, North Base - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 12/30/2011
Comments: Results of the aquifer tests and associated model update for OU 5/10 sites

Completed Area Name: 4/9 - Northeast AFRL
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Workplan
Completed Date: 08/22/2011
Comments: Workplan to assist in groundwater flow model projections

Completed Area Name: 8 - Operable Unit 8, Northwest Main Base
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/07/2011
Comments: Not reported

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Site 58
Completed Document Type: Monitoring Report
Completed Date: 07/29/2011
Comments: Annual monitoring report for Site 58 SVE system

Completed Area Name: Military Munitions Response Program (MMRP) - Basewide
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Workplan
Completed Date: 02/10/2012
Comments: Action Memo justifying the reason for the non-time critical action for MMRP clearance at surface for 5 parcels.

Completed Area Name: 8 - 25 Operable Unit - 8 - Site 25 Exotic Fuels
Completed Sub Area Name: Site 25
Completed Document Type: Monitoring Report
Completed Date: 01/10/2012
Comments: Site 25 GETS Annual Groundwater Monitoring Report for 2010. Annual monitoring report for the Site 25 Groundwater Extraction Treatment System. DTSC has reiterated a request for the Air Force to restart the GETS system.

Completed Area Name: 4/9 - Northeast AFRL
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 05/24/2012
Comments: Workplan to collect data and assess the vapor intrusion pathway at occupied buildings in the Northeast AFRL and Mars Blvd sites in OUs 4/9

Completed Area Name: 8 - Operable Unit 8, Northwest Main Base
Completed Sub Area Name: Not reported

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Completed Document Type: Remedial Investigation Workplan
Completed Date: 12/19/2011
Comments: Workplan to fill data gaps at Site 61, 299, and 301. FS will be updated pending receipt of the data acquired from this work.

Completed Area Name: 4A - AFRL Arroyos
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 04/13/2012
Comments: Provides the workplan for collecting data and assessing the vapor intrusion pathway for occupied buildings at the Arroyos

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Site 16
Completed Document Type: Pilot/Treatability Study Report
Completed Date: 01/24/2012
Comments: Site 16 In Situ Bioremediation Study Status Report

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 14
Completed Document Type: Operations and Maintenance Report
Completed Date: 10/13/2011
Comments: Annual report documenting the status of the Site 14 groundwater extraction system. System is operating as planned; however sidegradient and downgradient extent of TCE plume is still undefined. AF is conducting a monitoring well installation program to define the extent of the plume.

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 29
Completed Document Type: Record of Decision - Amendment
Completed Date: 10/16/2012
Comments: Record of Decision Amendment to change the remedy to a "Clean Closure" from the prior remedy of capping and land use covenants.

Completed Area Name: 4A - AFRL Area
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Workplan
Completed Date: 10/28/2011
Comments: Workplan to perform Tracer Test to assess bedrock aquifer fracture zone for modeling and groundwater monitoring.

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 12/29/2011
Comments: Characterization of the Vapor Intrusion Pathway at two selected buildings at Sites 16 and 18. Data indicate low risk to building occupants.

Completed Area Name: 5/10 - Operable Units 5 and 10, North Base
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/09/2011
Comments: OU 5/10 AGMR

Completed Area Name: 5/10 - Operable Units 5 and 10, North Base

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Completed Sub Area Name: Site 285
Completed Document Type: Monitoring Report
Completed Date: 01/30/2012
Comments: Annual Monitoring Report for the Site 285 Groundwater Extraction System

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Site 18
Completed Document Type: Monitoring Report
Completed Date: 12/23/2011
Comments: 2010 Annual report on the Site 18 Groundwater and vapor extraction system

Completed Area Name: 8 - 25 Operable Unit - 8 - Site 25 Exotic Fuels
Completed Sub Area Name: Site 25
Completed Document Type: Pilot/Treatability Study Report
Completed Date: 12/23/2011
Comments: Final report for the ISCO treatability study at Site 25. Results are mixed; some trouble getting delivery of the chemical to the contaminated groundwater. Final decision is to continue to monitor to see if ISCO eventually makes it to the contaminated zone.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Quality Assurance Workplan
Completed Date: 05/17/2012
Comments: This is the revised Basewide QAPP which includes updated standard operating procedures for field and analytical work at Edwards AFB.

Completed Area Name: 4A - AFRL Area
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 01/30/2012
Comments: AGMR for 2010 Groundwater Monitoring at the Arroyos, NE AFRL, and South AFRL.

Completed Area Name: 4/9 Mars Blvd Sites
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/03/2012
Comments: OU 4 & 9 Mars Blvd Sites 2009 & 2010 Annual GWM Reports and 2011 Sampling Plan. Originally, one document, subsequently broken into 3 documents when finalized.

Completed Area Name: 4/9 - South AFRL
Completed Sub Area Name: Not reported
Completed Document Type: Well Completion Report
Completed Date: 03/22/2012
Comments: Provides the well installation information and initial sampling data for monitoring wells installed in 2010-2011 as part of the remedial design. Data will be used for the upcoming five-year review report.

Completed Area Name: Operable Unit 4/9
Completed Sub Area Name: Not reported
Completed Document Type: Well Completion Report
Completed Date: 04/04/2012
Comments: Presents the results of the installation of new monitoring wells at

EDWARDS AIR FORCE BASE (Continued) **1000155217**

the AFRL Arroyos, Northeast AFRL, and Mars Blvd. Results in a revision to the Conceptual Site Model. The most significant change is at the Arroyos by moving the alluvium/bedrock aquifer transition several hundred feet closer to Leuhman Ridge.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 01/09/2012
Comments: This document provides the over-arching basewide conceptual site model for environmental contamination (including geology and hydrology) at the base and the relationship of on-base environmental issues to potential off-base occupants and water users.

Completed Area Name: 5/10 - Operable Units 5 and 10, North Base
Completed Sub Area Name: Site 285
Completed Document Type: Operations and Maintenance Plan
Completed Date: 06/01/2012
Comments: Updated sampling plan for the OU 5/10 Groundwater Extraction Treatment System.

Completed Area Name: 5/10 - Operable Units 5 and 10, North Base
Completed Sub Area Name: Site 285
Completed Document Type: Operations and Maintenance Manual
Completed Date: 06/01/2012
Comments: Updated O&M manual for the Site 285 Groundwater Extraction and Treatment System.

Completed Area Name: 6 - Operable Unit 6, NASA Dryden
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Report
Completed Date: 03/01/2003
Comments: OU 6 HHRA Report

Completed Area Name: 4/9 - South AFRL
Completed Sub Area Name: Not reported
Completed Document Type: 5 Year Review Reports
Completed Date: 09/19/2012
Comments: First Five Year Review for the South AFRL ROD. Air Force agrees to accelerate the groundwater monitoring program due to new predictions of plumes moving faster than thought during the ROD plus the need for further assessment of the Vapor Intrusion Pathway at Sites 37 and 133. Not reported

Completed Area Name: 8 - Operable Unit 8, Northwest Main Base
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Report
Completed Date: 03/01/2006
Comments: Ecological risk assessment for Sites 25, 61, 257, and 301 at OU 8

Completed Area Name: 8 - Operable Unit 8, Northwest Main Base - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 04/24/2008
Comments: Presents the results of the Site 299 and 301 RI investigation addendum.

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 01/28/2013
Comments: OU 1 2011 Groundwater Modeling Report: Although EAFB finalized this document, there remains significant disagreements in the conceptual site model and associated assumptions/inputs used for this model. EAFB felt that these issues would not be resolved and chose to close out their contract and issue a final document. Rather than outright reject or consider the document incomplete, DTSC will factor outstanding issues into future decision-making for OU 1.

Completed Area Name: 2 - Operable Unit 2, South Base - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Report
Completed Date: 11/01/2008
Comments: HHRA Addendum for OU 2 Sites

Completed Area Name: 2 - Operable Unit 2, South Base - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Report
Completed Date: 06/01/2003
Comments: OU 2 HHRA

Completed Area Name: 4/9 - South AFRL
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/07/2012
Comments: Presents the status of the long-term monitoring of the South AFRL Remedy. Activities included LUC and groundwater monitoring, and SVE which was turned off in 2010. The shut-down of the SVE is compliant with the remedy which allows the Air Force to adjust systems as needed to optimize the remedy.

Completed Area Name: 4A - AFRL Area
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Plan
Completed Date: 06/21/2012
Comments: 2012 groundwater monitoring plan for the OU 4/9 Northeast and South AFRL areas.

Completed Area Name: 6 - Operable Unit 6, NASA Dryden
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Plan
Completed Date: 04/02/2012
Comments: Not reported

Completed Area Name: 8 - 25 Operable Unit - 8 - Site 25 Exotic Fuels
Completed Sub Area Name: Site 25
Completed Document Type: Site Characterization Report
Completed Date: 08/20/2012
Comments: Workplan to conduct the vapor intrusion pathway assessment for the two occupied buildings down slope from Site 25, and overlying the Site 25 groundwater plume.

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Site 58

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Completed Document Type: Monitoring Report
Completed Date: 08/09/2012
Comments: Annual monitoring report for the OU 1 Site 58 SVE system

Completed Area Name: 4A - AFRL Arroyos
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Plan
Completed Date: 06/12/2012
Comments: Sampling plan (schedule) for June 2012 groundwater monitoring at the AFRL Arroyos.

Completed Area Name: 4/9 - Northeast AFRL
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 09/27/2012
Comments: DTSC and Air Force remain in disagreement with certain elements of the Conceptual Site Model and resulting interpretation of the aquifer test. This needs to be considered when the Air Force conducts modeling and designs remedial systems for the Northeast AFRL

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Site 58
Completed Document Type: Removal Action Workplan
Completed Date: 06/25/2012
Comments: Addendum to the workplan for Site 58 operations

Completed Area Name: 8 - Operable Unit 8, Northwest Main Base - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/25/2012
Comments: 2011 AGMR and 2012 Sampling Plan for OU 8 Groundwater Program

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 09/26/2012
Comments: Presents the status of the ISCO injection portion of the remedy to remediate the Site 5/14 Groundwater Contaminant Plume

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Not reported
Completed Document Type: Well Completion Report
Completed Date: 10/05/2012
Comments: Report that presents the results of the wells installed from 9/10-8/11
Not reported

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Site 18
Completed Document Type: Monitoring Report
Completed Date: 10/01/2012
Comments: Annual monitoring report for the Site 18 Dual Extraction System. No significant issues.

Completed Area Name: 4A - AFRL Area
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 11/13/2012

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Comments: Test to assess aquifer parameters in bedrock in the area where the Northeast AFRL plume is projected to migrate from bedrock to the alluvial aquifer.

Completed Area Name: 4A - AFRL Area
Completed Sub Area Name: Site 172
Completed Document Type: Monitoring Report
Completed Date: 08/31/2010
Comments: Site 172 Soil Vapor Extraction System Annual Operations Report for 2009

Completed Area Name: 6 - Operable Unit 6, NASA Dryden
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 04/15/2009
Comments: Final Report

Completed Area Name: 8 - Operable Unit 8, Northwest Main Base
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Report
Completed Date: 06/21/2007
Comments: Final HHRA Addendum for OU8

Completed Area Name: 8 - 25 Operable Unit - 8 - Site 25 Exotic Fuels
Completed Sub Area Name: Site 25
Completed Document Type: Monitoring Report
Completed Date: 12/20/2010
Comments: This is the 2009 Annual Groundwater Monitoring Report for Site 25.

Completed Area Name: 2 - Operable Unit 2, South Base - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Workplan
Completed Date: 10/16/2012
Comments: In response to regulatory concerns, the Air Force has developed this Workplan to assess the vertical extent of skeet fragments and lead shot in gridded areas where vertical extent is undefined.

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan
Completed Date: 04/08/2013
Comments: This document presents the updated sampling plan for Sites 5/14, 76, and 86. Also included are changes to the standard operating procedures for sampling and analyses.

Completed Area Name: 6 - Operable Unit 6, NASA Dryden
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Plan
Completed Date: 03/12/2013
Comments: DTSC Comments on Draft Final OU6 VISP & RA WP submitted to Air Force

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Site 18
Completed Document Type: Operations and Maintenance Plan
Completed Date: 01/28/2013
Comments: Workplan for the 2012-2013 operation of the DES system and the monitoring of groundwater contamination at Site 18.

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Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Not reported
Completed Document Type: Pilot Study/Treatability Workplan
Completed Date: 10/18/2012
Comments: Plan to conduct an enhanced in-situ biogeochemical transormation of VOCs pilot study at Site 19

Completed Area Name: 4/9 - Soil and Debris Sites
Completed Sub Area Name: Not reported
Completed Document Type: 5 Year Review Reports
Completed Date: 08/05/2013
Comments: OU 4/9 Soils and Debris Sites Five Year Review Report

Completed Area Name: 6 - Operable Unit 6, NASA Dryden
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Plan Amendment
Completed Date: 04/10/2013
Comments: OU6 Remedial Action Workplan has been finalized.

Completed Area Name: 4/9 Mars Blvd Sites
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/19/2013
Comments: 2011 Annual GWM Report OU 4/9 Mars Blvd Sites 6, 27, 39, 113, 115, 116, 118, 125, 127, 178, 321, 333, and 338

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Quality Assurance Workplan
Completed Date: 02/29/2008
Comments: Updated Basewide Quality Assurance Project Plan includes the Basewide FSP and SAP

Completed Area Name: 5/10 - Operable Units 5 and 10, North Base
Completed Sub Area Name: Not reported
Completed Document Type: Feasibility Study Report
Completed Date: 07/31/2007
Comments: Data gaps sampling report to obtain additional data for selected sites to finalize the FS

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 5
Completed Document Type: Remedial Investigation Workplan
Completed Date: 05/17/2013
Comments: OU 2 Site 5 Remedial Investigation Workplan to investigate the source of the carbon tetrachloride detected in groundwater downgradient from Site 5. Plan is to conduct a soil vapor survey and groundwater sampling of existing wells to locate the CT source.

Completed Area Name: 4/9 Mars Blvd Sites
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Plan
Completed Date: 04/18/2013
Comments: 2012 Annual Groundwater Monitoring Sampling QAPP Plan. Provides the plan for sampling groundwater in 2012 at the Mars Boulevard Sites.

Completed Area Name: 7 - Operable Unit 7, Basewide Misc.

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Completed Sub Area Name: Site 339
Completed Document Type: Feasibility Study Report
Completed Date: 06/20/2013
Comments: Report finalized by AF, but DTSC has documented concerns to be addressed prior to ROD

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 14
Completed Document Type: Design/Implementation Workplan
Completed Date: 12/26/2012
Comments: This is a "letter" workplan addendum for relatively minor remediation system and monitoring modifications.

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Plan
Completed Date: 03/06/2013
Comments: Final 2012 GWMSP Submitted. No further comments.

Completed Area Name: 5/10 - Operable Units 5 and 10, North Base
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Plan
Completed Date: 10/16/2012
Comments: This document provides the groundwater sampling plan for 2012 at OU 5/10

Completed Area Name: 4A - AFRL Area
Completed Sub Area Name: Site 312
Completed Document Type: Record of Decision w/ESD
Completed Date: 07/16/2013
Comments: This Explanation of Significant Difference from the (Soils and Debris Sites) ROD is to document the remedy change for Site 312, an active transformer station on Leuhman Ridge. Because of impacts to the EAFB "Mission", the transformer could be shut down for only a specific period of time for the soil excavation remedy. Air Force attempted "clean closure" but was unable to remove PCB contaminated soil from a small area below the concrete pad and a small area below the adjoining asphalt area. Concentrations of PCBs in soil remaining at the site are above residential cleanup levels necessitating a land use covenant restricting residential use and warning workers of the presence of potentially impacted covered soil.

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 07/01/2004
Comments: This is an update to the 1996 RI report. It incorporates new data acquired since the prior RI report was published.

Completed Area Name: 6 - Operable Unit 6, NASA Dryden
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/01/2013
Comments: Not reported

Completed Area Name: 8 - 25 Operable Unit - 8 - Site 25 Exotic Fuels
Completed Sub Area Name: Site 25

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Completed Document Type: Well Installation Workplan
Completed Date: 03/29/2013
Comments: Not reported

Completed Area Name: 5/10 - Operable Units 5 and 10, North Base
Completed Sub Area Name: Not reported
Completed Document Type: Feasibility Study Report
Completed Date: 08/02/2013
Comments: RI/FS Addendum: Site Characterization and Plume Delineation Data Summary Report. Presents the results of data gaps by conducting soil vapor sampling and installing/sampling additional monitoring wells.

Completed Area Name: 8 - Operable Unit 8, Northwest Main Base - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 09/26/2013
Comments: Remedial Investigation Summary Report Addendum for Sites 61, 299, and 301. DTSC has reviewed and accepts the final document which details the data gaps investigation work at the three OU 8 groundwater plume sites.

Completed Area Name: 5/10 - Operable Units 5 and 10, North Base
Completed Sub Area Name: Site 285
Completed Document Type: Monitoring Report
Completed Date: 04/05/2013
Comments: Site 285 Groundwater Extraction and Treatment System O&M Report for September 2011-September 2012. Presents the O&M activities (including extraction well sampling) for the GETS to remediate perchlorate in groundwater at Site 285.

Completed Area Name: 4A - AFRL Area
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 08/22/2013
Comments: AFRL Arroyos, Northeast AFRL, and Mars Blvd Well Installation Report for 2011-2012

Completed Area Name: 7 - Operable Unit 7, Basewide Misc.
Completed Sub Area Name: Site 442
Completed Document Type: Design/Implementation Workplan
Completed Date: 01/31/2014
Comments: Soil Gas Sampling Workplan, OU 7, Chemical Warfare Material Site 442, Areas 1, 2, and 3. Sampling is needed pursuant to the ROD to ensure protectiveness of possible chemical release from these CWM landfills.

Completed Area Name: 4A - AFRL Area
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 06/14/2013
Comments: Geophysical Surveys to Delineate the Spring Fault and GW Transition from Bedrock to Alluvial Aquifer, Arroyos and NE AFRL Areas

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 12/01/2012
Comments: Revised/updated RAB Charter and Bylaws approved by the RAB in 2012.

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Primary changes made to meetings (reduced from four to two per year) and incorporation of social media (Facebook) for communications.

Completed Area Name: 4A - AFRL Arroyos
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 02/13/2013
Comments: Meeting to Develop Workplan for Arroyos Data Gaps. This meeting was held on 2/13/13; DTSC (and other regulatory agencies) provided input and added ideas on the Air Force's plans to address Arroyos and Northeast AFRL data gaps.

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 29
Completed Document Type: Remedial Action Implementation Workplan
Completed Date: 07/25/2013
Comments: Site 29 Remedial Action Work Plan. Presents the workplan to remove the contaminated soil and debris at Site 29.

Completed Area Name: 8 - 25 Operable Unit - 8 - Site 25 Exotic Fuels
Completed Sub Area Name: Site 25
Completed Document Type: Monitoring Report
Completed Date: 08/06/2013
Comments: Site 25 GETS Biennial Groundwater Monitoring Report-January 2011 to December 2012. Air Force did not issue a draft final. DTSC identified problems with the final and on 8/6/13 issued a draft comment letter.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 07/16/2013
Comments: Workplan for Vapor Intrusion Assessment at (high priority buildings at) OU's 1, 4/9, 5/10, and 8

Completed Area Name: 2 - Operable Unit 2, South Base - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Engineering Evaluation / Cost Analysis - Time Critical
Completed Date: 10/16/2014
Comments: Sites 81 and 102 EE/CA for Removal of Lead Shot and Skeet Fragments. Selected "removal action" will actually be a cap consisting of crushed concrete and areas with soil/vegetation to allow for limited habitat restoration.

Completed Area Name: 7 - Operable Unit 7, Basewide Misc.
Completed Sub Area Name: Site 442
Completed Document Type: Operations and Maintenance Plan
Completed Date: 09/13/2013
Comments: OU 7 Chemical Warfare Material Site 442 O&M Plan for Cap

Completed Area Name: 4/9 - South AFRL
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Plan
Completed Date: 11/11/2013
Comments: South AFRL 2013 Ground Water Sampling Workplan. DTSC disagrees with the number of wells to be sampled; however the Air Force is planning a more comprehensive sampling event in 2014 essentially deferring DTSC concerns.

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Completed Area Name: 4A - AFRL Arroyos
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/24/2013
Comments: Arroyos 2012 Groundwater Monitoring Report

Completed Area Name: 5/10 - Operable Units 5 and 10, North Base
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/12/2013
Comments: OU 5/10 Annual Groundwater Monitoring Report for April-December 2012. Air Force did not address all of DTSC comments on the draft document. Issues will need to be tracked for future relevant documents.

Completed Area Name: 7 - Operable Unit 7, Basewide Misc.
Completed Sub Area Name: Site 442
Completed Document Type: Remedial Action Completion Report
Completed Date: 08/27/2013
Comments: Site 442 Remedial Action Completion Report-Remedial Design and Construction. Air Force did not give DTSC adequate time to review the changes in the draft final and the response to comments on the draft report; however a review of the final shows that DTSC concerns on the draft report were addressed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Participation Plan / Community Relations Plan
Completed Date: 03/21/2014
Comments: Community Involvement Plan 2014 update to the Community Relations Plan Not reported

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Site 58
Completed Document Type: Monitoring Plan
Completed Date: 09/03/2013
Comments: Site 58 Soil Vapor Extraction QAPP Letter Addendum No. 3

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 76
Completed Document Type: Operations and Maintenance Report
Completed Date: 10/30/2013
Comments: Replacement pages recieved from AF

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 86
Completed Document Type: Operations and Maintenance Report
Completed Date: 10/30/2013
Comments: Final Replacement Pages submitted by AF

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 09/23/2013
Comments: Basewide Subsurface Nitrate Characterization QAPP (Workplan), OUs 1, 4/9, 7, and 8

Completed Area Name: 8 - Operable Unit 8, Northwest Main Base

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/18/2014
Comments: OU 8 - 2012 Annual Groundwater Monitoring Report for Sites 61, 257, 299, and 301. DTSC reviewed the final and determined that all comments were adequately addressed.

Completed Area Name: 8 - 25 Operable Unit - 8 - Site 25 Exotic Fuels
Completed Sub Area Name: Site 25
Completed Document Type: Remedial Investigation Report
Completed Date: 04/03/2014
Comments: OU 8 Site 25 Remedial Investigation Report Addendum. Presents the results of additional geophysics and well installation to characterize the site.

Completed Area Name: 4A - AFRL Area
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/22/2013
Comments: OU 4 & 9 2012 Annual Groundwater Monitoring Report for Northeast and South AFRL

Completed Area Name: 4A - AFRL Arroyos
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 06/29/2014
Comments: Report of 2012 and 2013 Sampling to Evaluate Vapor Intrusion Pathway at the AFRL Arroyos. Outstanding issues were identified in DTSC's 6/30/14 Contingent Concurrence letter. DTSC will work with the Air Force to address outstanding issues. The Arroyos ROD will be the venue for addressing the issues

Completed Area Name: 5/10 - Operable Units 5 and 10, North Base
Completed Sub Area Name: Site 285
Completed Document Type: Monitoring Plan
Completed Date: 12/26/2013
Comments: OU 5/10 Site 285 GETS QAPP Adddendum. Update to the Site 285 groundwater treatment plant sampling/monitoring program.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Plan
Completed Date: 04/05/2014
Comments: Basewide Groundwater Monitoring SAP, Vol 1-Long Term Monitoring Optimization Work Plan.

Completed Area Name: 6 - Operable Unit 6, NASA Dryden
Completed Sub Area Name: Not reported
Completed Document Type: Quality Assurance Workplan
Completed Date: 03/06/2014
Comments: Electronic copy recieved 28 March 2014

Completed Area Name: 2 - Operable Unit 2, South Base - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Implementation Workplan
Completed Date: 10/31/2013
Comments: DTSC Provided email stating no further comments

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Completed Area Name:	4/9 - Soil and Debris Sites
Completed Sub Area Name:	Not reported
Completed Document Type:	Operations and Maintenance Report
Completed Date:	05/31/2013
Comments:	Soils and Debris Sites 2013 Land Use Control Inspection Report
Completed Area Name:	8 - Operable Unit 8, Northwest Main Base
Completed Sub Area Name:	Not reported
Completed Document Type:	Well Installation Workplan
Completed Date:	09/16/2013
Comments:	Sites 61, 299, and 301 Well Installation Letter Workplan Addednum to the RI Workplan Addendum. Workplan to install additional wells at the three sites to address identified data gaps.
Completed Area Name:	9 - Air Force Research Lab - East
Completed Sub Area Name:	Site 125
Completed Document Type:	Site Characterization Report
Completed Date:	08/22/2013
Comments:	Site 125 Results of 2013 Well Installation Letter Report. This "addendum" to the OU 4/9 2011-2012 Well Installation Report (WIR) was finalized as an appendix to the WIR.
Completed Area Name:	4A - AFRL Area
Completed Sub Area Name:	Not reported
Completed Document Type:	Well Installation Workplan
Completed Date:	06/23/2014
Comments:	Well Installation Workplan-OU 4 Arroyos & South AFRL. Air Force and regulators collaboratively selected well locations. Note however, DTSC has informed the Air Force that these wells may not be sufficient for providing adequate South AFRL and Aroryos plume control Not reported
Completed Area Name:	1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name:	Site 58
Completed Document Type:	Monitoring Report
Completed Date:	01/23/2014
Comments:	Site 58 Annual Monitoring Report for the Soil Vapor Extraction System Nov ’11 through Oct ’12.
Completed Area Name:	7 - Operable Unit 7, Basewide Misc.
Completed Sub Area Name:	Site 442
Completed Document Type:	5 Year Review Reports
Completed Date:	12/20/2014
Comments:	Chemical Warfare Material First Five-Year Review Report. DTSC concurred with (via signing the signature page of) the final Report
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Enforceable Schedule
Completed Date:	10/10/2013
Comments:	2013 Update to the FFA Schedule
Completed Area Name:	4A - AFRL Area
Completed Sub Area Name:	Site 312
Completed Document Type:	Remedial Action Completion Report
Completed Date:	01/23/2014
Comments:	Site 312 Addendum to the Soil and Debris Sites Remedial Action

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Completion Report. This report documents the remedy for the Site 312 ESD which changed the remedy from "clean closure" to Land Use Controls to protect potential receptors from a small amount of PCB-contaminated soil below the asphalt near the Site 312 transformer.
Not reported

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Site 18
Completed Document Type: Monitoring Report
Completed Date: 02/21/2014
Comments: OU 1 Site 18 Annual Monitoring Report November 2011 through October 2012

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 14
Completed Document Type: Operations and Maintenance Manual
Completed Date: 04/14/2014
Comments: OU2, Site 14 GETS O&M Manual

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 86
Completed Document Type: Operations and Maintenance Manual
Completed Date: 04/14/2014
Comments: OU2, Site 86 O&M Manual

Completed Area Name: 4A - AFRL Arroyos
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 02/17/2014
Comments: OU 4 Arroyos Phase 2 Geophysical Survey Work Plan to Delineate Bedrock Topography and Transition to Alluvial Aquifer. DTSC believes that a reflection survey rather than the proposed refraction survey would be better at identifying the transition zone. AF cited budgetary reasons, but also attempted to make a technical case that the goals will be attained using the porposed refraction survey.

Completed Area Name: 2 - Operable Unit 2, South Base - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/24/2014
Comments: Final OU2 Sites 5/14 Annual RASR received on 24 June 2014

Completed Area Name: 8 - 25 Operable Unit - 8 - Site 25 Exotic Fuels
Completed Sub Area Name: Site 25
Completed Document Type: Remedial Investigation Workplan
Completed Date: 06/23/2012
Comments: Letter Addendum to the Site 25 RI/FS Work Plan Addendum. Workplan to install 7 additional monitoring wells.

Completed Area Name: 7 - Operable Unit 7, Basewide Misc.
Completed Sub Area Name: Site 442
Completed Document Type: Operations and Maintenance Report
Completed Date: 06/16/2014
Comments: Site 442 Annual Remedial Action Status Report March 2013 to October 2013

Completed Area Name: 8 - 25 Operable Unit - 8 - Site 25 Exotic Fuels

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Completed Sub Area Name: Site 25
Completed Document Type: Remedial Investigation Report
Completed Date: 08/01/2014
Comments: Site 25 VIP Investigation Summary Report, Buildings 4824 and 4870. Air Force finalized this document on 8/1/14 without resolving selected critical issues. DTSC will carry these issues forward into the FS

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Site 58
Completed Document Type: Removal Action Workplan Amendment
Completed Date: 06/23/2014
Comments: Site 58 Letter Addendum No. 4 to the QAPP

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 05/28/2016
Comments: Vapor Intrusion Assessment for 11 Selected Buildings at OUs 1, 5/10, and 8, Round 1 Sampling.

Completed Area Name: 4/9 Mars Blvd Sites
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 10/02/2014
Comments: 2012 Annual Groundwater Monitoring Report for "Mars Blvd" Sites 6, 27, 39, 113, 115, 116, 118, 125, 127, 178, 321, 333, AND 338

Completed Area Name: 9 - Air Force Research Lab - East
Completed Sub Area Name: Site 125
Completed Document Type: Remedial Investigation Workplan
Completed Date: 06/02/2014
Comments: 2014 Letter Addendum to the 2010 Well Installation Work Plan For Sites in the Northeast AFRL and Mars Blvd. This addendum, although officially part of the 2010 Well Installation Workplan, is tied directly to the 2013 Letter Addendum to the 2010 Well Installation Workplan. This 2013 addendum was inserted as Appendix F.1 to the 2010 Workplan. The conclusion of the 2014 Letter Addendum is there was no need to install well 125-MW27, contrary to the original purpose of this addendum which was to install 125-MW27. However groundwater sampling conducted subsequent to the draft of this Workplan Addendum showed that 125-MW27 is not needed (at this time).

Completed Area Name: 7 - Operable Unit 7, Basewide Misc.
Completed Sub Area Name: Site 3
Completed Document Type: Remedial Action Implementation Workplan
Completed Date: 08/27/2014
Comments: Geophysical Survey WP to Assess Site 3 Potential Preferential Pathways Affecting GW Flow and Contaminant Transport

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 5
Completed Document Type: Remedial Investigation Report
Completed Date: 11/03/2014
Comments: OU2, Site 5, Remedial Investigation Report will be complted by June 30.

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 76
Completed Document Type: Remedial Action Completion Report
Completed Date: 08/12/2014
Comments: Report title changed to Remedial Action Construction Progress Report

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 86
Completed Document Type: Remedial Action Completion Report
Completed Date: 08/11/2014
Comments: Report Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Plan
Completed Date: 01/20/2015
Comments: Basewide 2014 Groundwater Monitoring Plan-OU1/8, OU4/9, OU5/10 and Site 25

Completed Area Name: 5/10 - Operable Units 5 and 10, North Base
Completed Sub Area Name: Site 285
Completed Document Type: Monitoring Report
Completed Date: 10/16/2014
Comments: Site 285 GETS Annual Operation and Maintenance (10/12-9/13) Report

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Site 18
Completed Document Type: Monitoring Report
Completed Date: 08/14/2014
Comments: OU 1 Site 18 Annual O&M Report November 2012 through October 2013

Completed Area Name: 2 - Operable Unit 2, South Base - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Implementation Workplan
Completed Date: 09/08/2014
Comments: Final OU2, Sites 5/14, 76 and 86 RAWP Addendum, Update 1

Completed Area Name: 6 - Operable Unit 6, NASA Dryden
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 05/27/2016
Comments: See previous note regarding replacement of this document with Vapor Intrusion Investigation Report Addendum dated May 2016.

Completed Area Name: 4A - AFRL Area
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 08/12/2014
Comments: Report of 2012 and 2013 Sampling to Evaluate VIP at the Northeast AFRL and Mars Blvd Sites. On 8/12/14 DTSC provided a draft letter to the Air Force outlining outstanding issues for this report; issues that will be carried through to the FS.

Completed Area Name: 7 - Operable Unit 7, Basewide Misc.
Completed Sub Area Name: Site 538
Completed Document Type: Preliminary Assessment/Site Inspection Report (PA/SI)
Completed Date: 02/17/2015

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Comments:	OU 3 Site 538 Preliminary Assessment/Site Inspection Report (PA/SI). DTSC has determined that further evaluation on the source of TCE in monitoring well 13-MW33 (Site 538) is warranted. Air Force agrees and this will be part of the South AFRL Remedial Action Workplan Version 2 scheduled for late 2015.
Completed Area Name:	4A - AFRL Arroyos
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Characterization Report
Completed Date:	07/01/2014
Comments:	OU 4/9 Arroyos Phase 2 Geophysical Survey Report
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Removal Action Completion Report
Completed Date:	10/04/2014
Comments:	Non-Time Critical Removal Action MMRP Surface Clearance, Munitions Sites AL504, AL505-2, and AL505-4. This document was issued only as a final report; it comprises a summary of activities and field documentation of the surface clearance actions for the above listed munitions sites.
Completed Area Name:	4/9 - Soil and Debris Sites
Completed Sub Area Name:	Not reported
Completed Document Type:	Land Use Restriction Monitoring Report
Completed Date:	08/12/2014
Comments:	AFRL Soil and Debris Sites Annual LUC Inspection and Maintenance Report Addendum May-December 2013. DTSC has reviewed and concurs with the document. No letter is required for this document issued as final. Not reported
Completed Area Name:	1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name:	Not reported
Completed Document Type:	Monitoring Report
Completed Date:	02/17/2015
Comments:	OU 1 GWM and Sampling Report for 2012
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Soil Vapor Extraction Monitoring Report
Completed Date:	09/05/2012
Comments:	OU 4&9 Site 37 Building 8595 SVE System Reactivation and Sampling Memorandum
Completed Area Name:	Military Munitions Response Program (MMRP) - Basewide
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Investigation Workplan
Completed Date:	08/14/2015
Comments:	Remedial Investigation Workplan for Munitions Response Sites AL501A, AL504, AL505-2, and AL505-4. This document is the plan for conducting subsurface reconnaissance of areas of potential buried munitions.
Completed Area Name:	Military Munitions Response Program (MMRP) - Basewide
Completed Sub Area Name:	Not reported
Completed Document Type:	Quality Assurance Workplan
Completed Date:	08/14/2015
Comments:	MMRP Site Insepction QAPP: Supplemental Comprehensive Site Evaluation

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Phase II for Munitions Response Sites AL505-3 and AL505-5

Completed Area Name: 4/9 - South AFRL
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/01/2015
Comments: South AFRL 2013 Annual Groundwater Monitoring Report

Completed Area Name: 8 - Operable Unit 8, Northwest Main Base
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/15/2015
Comments: OU 8 Sites 61, 299, and 301 Annual Groundwater Monitoring Report for 2013

Completed Area Name: Military Munitions Response Program (MMRP) - Basewide
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 10/06/2014
Comments: MMRP After Action Report Non-time Critical Removal Action-surface Clearance MRS's AL 504, AL 505-2, and AL 505-4. This document is a compilation of field and laboratory forms documenting the surface clearance removal performed in 2014.

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 86
Completed Document Type: Operations and Maintenance Report
Completed Date: 02/05/2015
Comments: Final Version of OU2 Site 86 ARASR

Completed Area Name: 5/10 - Operable Units 5 and 10, North Base
Completed Sub Area Name: Not reported
Completed Document Type: Feasibility Study Workplan
Completed Date: 07/20/2015
Comments: OU 5/10 Feasibility Study Workplan. This Workplan documents addition work to be completed to address data gaps at selected OU 5/10 sites. Not being addressed are additional data gaps identified previously by the regulators in comments on the draft and draft final Feasibility Study. The Air Force intends to address these regulator-identified data gaps in a future workplan.

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Site 58
Completed Document Type: Monitoring Report
Completed Date: 03/31/2015
Comments: Site 58 Annual Monitoring Report for the Soil Vapor Extraction System Nov '12 through Oct '13

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 76
Completed Document Type: Monitoring Report
Completed Date: 03/04/2015
Comments: Final Site 76 RASR Submitted by AF

Completed Area Name: 7 - Operable Unit 7, Basewide Misc.
Completed Sub Area Name: Site 3
Completed Document Type: Remedial Action Implementation Workplan

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Completed Date:	04/16/2016
Comments:	Site 3 Remedial Action Workplan Volumes I and II
Completed Area Name:	2 - Operable Unit 2, South Base - MULTIPLE SITES
Completed Sub Area Name:	Not reported
Completed Document Type:	Removal Action Workplan
Completed Date:	02/09/2015
Comments:	Sites 81 and 102 Action Memorandum, Non-time Critical Removal Action. DTSC concurs with the proposed action
Completed Area Name:	2 - Operable Unit 2, South Base - MULTIPLE SITES
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Action Implementation Workplan
Completed Date:	06/17/2015
Comments:	Final RAWP Addendum for OU2 Sites 76, 86 and 5/14
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Investigation Workplan
Completed Date:	07/10/2015
Comments:	Addendum to Workplan for Vapor Intrusion Assessment at (high priority buildings at) OU's 1, 4/9, 5/10, and 8. DTSC is on record disagreeing with the workplan not including subslab vapor sampling.
Completed Area Name:	7 - Operable Unit 7, Basewide Misc.
Completed Sub Area Name:	Site 3
Completed Document Type:	Monitoring Plan
Completed Date:	09/11/2015
Comments:	Site 3 Pre-Design Groundwater and Landfill Gas 2015 Sampling Plan. This "plan" is actually a one-page memorandum describing sampling strategy for the Site 3 Landfill Gas.
Completed Area Name:	4A - AFRL Arroyos
Completed Sub Area Name:	Not reported
Completed Document Type:	Monitoring Report
Completed Date:	10/12/2015
Comments:	AFRL Arroyos 2013 GWM Report. DTSC reviewed and finds the final report acceptable.
Completed Area Name:	4/9 - Northeast AFRL
Completed Sub Area Name:	Not reported
Completed Document Type:	Monitoring Report
Completed Date:	07/22/2015
Comments:	OU 4/9 Northeast AFRL 2013 GWM Report
Completed Area Name:	7 - Operable Unit 7, Basewide Misc. - MULTIPLE SITES
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Investigation Workplan
Completed Date:	09/01/2015
Comments:	Final document issued by AF on 9/1/2015
Completed Area Name:	2 - Operable Unit 2, South Base - MULTIPLE SITES
Completed Sub Area Name:	Not reported
Completed Document Type:	Monitoring Report
Completed Date:	05/28/2015
Comments:	Final document received by DTSC.

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Site 58
Completed Document Type: Technical Report
Completed Date: 06/01/2015
Comments: Not reported

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Site 18
Completed Document Type: Monitoring Report
Completed Date: 05/11/2015
Comments: Site 18 DES Annual O&M Report November 2013-October 2014. DTSC has expressed concern about the system being shut down for a lengthy period of time (the AF shut it down in 2013 to conduct nearby soil vapor sampling as part of a vapor intrusion investigation). The AF has responded that they restart the system monthly as part of routine O&M activities.

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 5
Completed Document Type: Site Characterization Workplan
Completed Date: 08/19/2015
Comments: Change pages from DF to Final received from Air Force.

Completed Area Name: 5/10 - Operable Units 5 and 10, North Base
Completed Sub Area Name: Site 285
Completed Document Type: Monitoring Report
Completed Date: 06/24/2015
Comments: Site 285 GETS Annual Operation and Maintenance (10/13-9/14) Report

Completed Area Name: 4A - AFRL Area
Completed Sub Area Name: Site 37
Completed Document Type: Operations and Maintenance Report
Completed Date: 08/03/2015
Comments: Site 37 SVE O&M and Building 8595 Vapor Intrusion Monitoring Report for 2013. Note that DTSC disagrees with conclusions regarding VI screening numbers and the recommendation to no longer sample subslab VI wells

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Plan
Completed Date: 12/16/2015
Comments: Long-term Monitoring Optimization Volume II-Operable Units 1/8 GWM Sampling and Analysis Plan. There remain some important issues that will need to be resolved as part of the joint Air force-Regulator working group that will evaluate the 2015 groundwater monitoring data and make recommendations for future monitoring needs.

Completed Area Name: 7 - Operable Unit 7, Basewide Misc.
Completed Sub Area Name: Site 442
Completed Document Type: Operations and Maintenance Report
Completed Date: 06/08/2015
Comments: Site 442 Annual (Nov 2013 to Oct 2014) Remedial Action Status Report

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 86
Completed Document Type: Operations and Maintenance Report

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Completed Date: 05/28/2015
Comments: Final Version of Site 86 ARASR - 11/12-9/14 Submitted by AF on May 28, 2015.

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 5
Completed Document Type: Remedial Investigation Workplan
Completed Date: 06/04/2015
Comments: AF submitted Interim Draft Final & RTCs. Comments minor. AF approved to finalize document.

Completed Area Name: 2 - Operable Unit 2, South Base - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Well Installation Workplan
Completed Date: 06/22/2015
Comments: Final document received on 06/22/2015

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Site 58
Completed Document Type: Monitoring Report
Completed Date: 06/26/2015
Comments: Annual SVE Report, DTSC expressed a desire for the SVE system (currently shut-down) to remain available for being turned on at a future a date if needed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Report
Completed Date: 02/28/2016
Comments: OU 1, 4/9, 7, and 8 Subsurface Nitrate Characteization Report. Outstanding issue remain; DTSC is relying on the RWQCB to continue to work these issues with the Air Force

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Well Installation Workplan
Completed Date: 08/18/2015
Comments: OU 1/8 Well Installation Workplan

Completed Area Name: 4/9 - South AFRL
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Implementation Workplan
Completed Date: 07/30/2016
Comments: South AFRL Remedial Action Workplan Version 2.0

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 76
Completed Document Type: Operations and Maintenance Report
Completed Date: 07/20/2015
Comments: Not reported

Completed Area Name: 4/9 AFRL Misc. Documents
Completed Sub Area Name: Not reported
Completed Document Type: Well Completion Report
Completed Date: 07/02/2015
Comments: South & NE AFRL and Mars Blvd Sites Well Installation Report. DTSC had no comments on the draft report.

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Completed Area Name: 8 - 25 Operable Unit - 8 - Site 25 Exotic Fuels
Completed Sub Area Name: Site 25
Completed Document Type: Well Completion Report
Completed Date: 01/19/2016
Comments: Site 25 Remedial Investigation Report Addendum No. 2

Completed Area Name: 2 - Operable Unit 2, South Base - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 08/21/2015
Comments: Final document received by DTSC.

Completed Area Name: 8 - 25 Operable Unit - 8 - Site 25 Exotic Fuels
Completed Sub Area Name: Site 25
Completed Document Type: Monitoring Plan
Completed Date: 10/30/2015
Comments: Site 25 Letter Addendum to the Basewide GW Monitoring UFP-QAPP, 2015 Interim GW Monitoring Plan

Completed Area Name: 7 - Operable Unit 7, Basewide Misc.
Completed Sub Area Name: Site 3
Completed Document Type: Remedial Action Implementation Workplan
Completed Date: 10/08/2016
Comments: Site 3 Remedial Action Workplan Volume III. This provides the long term monitoring program for the Site 3 Landfill remedy.

Completed Area Name: 4/9 AFRL Misc. Documents
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Plan
Completed Date: 07/23/2015
Comments: OU 4/9 Interim Groundwater Monitoring Plan for 2015-Letter Addendum to the Basewide GWM Plan

Completed Area Name: 5/10 - Operable Units 5 and 10, North Base
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/01/2016
Comments: OU 5/10 Annual Groundwater Monitoring Report for 2014

Completed Area Name: 4A - AFRL Area
Completed Sub Area Name: Site 37
Completed Document Type: Operations and Maintenance Report
Completed Date: 06/30/2016
Comments: Site 37 SVE O&M and Building 8595 Vapor Intrusion Monitoring Report for 2014. DTSC has reviewed the final report; there remain outstanding disagreements described in the Responses to Comments table in Appendix E. No letter issued on the final, but DTSC will ensure raised issues are factored into the review of the subsequent 2015 monitoring report.

Completed Area Name: 4A - AFRL Arroyos
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/15/2016
Comments: AFRL Arroyos 2014 GWM Report

Completed Area Name: 4/9 Mars Blvd Sites

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/06/2016
Comments: Sites 6 and 113 Groundwater Monitoring Report for 2014

Completed Area Name: 4/9 Mars Blvd Sites
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/23/2016
Comments: Mars Blvd Sites 2014 GWM Report. DTSC identified a laboratory QA/QC issue where PCE concentrations appeared "depressed" compared to historical results.

Completed Area Name: 8 - 25 Operable Unit - 8 - Site 25 Exotic Fuels
Completed Sub Area Name: Site 25
Completed Document Type: Monitoring Report
Completed Date: 07/19/2016
Comments: Site 25 Biennial Groundwater Monitoring Report 2013-2014

Completed Area Name: 4A - AFRL Area
Completed Sub Area Name: Site 13
Completed Document Type: Operations and Maintenance Plan
Completed Date: 11/09/2015
Comments: Site 13 Landfill 2015 Post Closure Maintenance and Monitoring Plan. This site is undergoing post-closure monitoring under the Kern County Health Department; DTSC will review the status as part of the South AFRL Five Year Reviews.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 03/11/2014
Comments: US Fish and Wildlife 03/11/14 Biological Opinion

Completed Area Name: 4/9 - South AFRL
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/30/2016
Comments: South AFRL 2014 Annual Groundwater Monitoring Report

Completed Area Name: 2 - Operable Unit 2, South Base - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Workplan
Completed Date: 06/06/2016
Comments: Sites 81 and 102 Supplemental Workplan

Completed Area Name: 7 - Operable Unit 7, Basewide Misc.
Completed Sub Area Name: Site 442
Completed Document Type: Operations and Maintenance Report
Completed Date: 06/16/2016
Comments: Site 442 Annual Remedial Action Stutus Report November 2014 - September 2015

Completed Area Name: 4/9 - Northeast AFRL
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/21/2016

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Comments: OU 4/9 Northeast AFRL 2014 GWM Report

Completed Area Name: Multiple OUs - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 12/09/2016
Comments: OB/OD Sites 39 and 270 Remedial Investigation Workplan

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 76
Completed Document Type: Monitoring Report
Completed Date: 07/20/2016
Comments: Completed

Completed Area Name: 4/9 - Soil and Debris Sites
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Implementation Workplan
Completed Date: 05/16/2016
Comments: Soil and Debris Sites RAWP Addendum 1 (Site 13 Vapor Monitoring)

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 86
Completed Document Type: Monitoring Report
Completed Date: 07/15/2016
Comments: Not reported

Completed Area Name: 4/9 - Soil and Debris Sites
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction Monitoring Report
Completed Date: 02/27/2016
Comments: OU 4/9 Soil and Debris Sites Land Use Controls Inspection/Maintenance Report for 2015. Document issued as final. DTSC reviewed; no comment letter required or distributed by DTSC.

Completed Area Name: 9 - Air Force Research Lab - East - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/18/2016
Comments: Sites 6 and 113 Groundwater Monitoring Report for 2015

Completed Area Name: 2 - Operable Unit 2, South Base - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Operations and Maintenance Report
Completed Date: 09/16/2016
Comments: Completed

Completed Area Name: 4/9 Mars Blvd Sites
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/07/2017
Comments: Sites 6 and 113 Groundwater Monitoring Report for 2016

Completed Area Name: 7 - Operable Unit 7, Basewide Misc.
Completed Sub Area Name: Site 442
Completed Document Type: Operations and Maintenance Report
Completed Date: 04/12/2017
Comments: Site 442 Annual Remedial Action Status Report October 2015 -

EDWARDS AIR FORCE BASE (Continued) **1000155217**

September 2016

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 86
Completed Document Type: Monitoring Report
Completed Date: 06/30/2017
Comments: Final OU2, Site 86 ARASR issued on June 30, 2017 but DTSC did not receive a copy until 1/12/2018.

Completed Area Name: 4/9 - South AFRL
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/17/2017
Comments: OU 4/9 South AFRL 2015 Annual Groundwater Monitoring Report

Completed Area Name: 4/9 - Northeast AFRL
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/17/2017
Comments: OU 4/9 Northeast AFRL 2015 GWM Report

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 76
Completed Document Type: Monitoring Report
Completed Date: 08/18/2017
Comments: Final OU2 Site 76 ARASR, Oct 2015 - Sept 2016

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/26/2017
Comments: OU 1/8 GWM and Sampling Report for 2015

Completed Area Name: 8 - 25 Operable Unit - 8 - Site 25 Exotic Fuels
Completed Sub Area Name: Site 25
Completed Document Type: Monitoring Plan
Completed Date: 04/30/2018
Comments: Basewide GWM Sampling and Analysis Plan-Volume V, Site 25 Long-Term Monitoring Optimization Plan

Completed Area Name: 4/9 - Soil and Debris Sites
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction Monitoring Report
Completed Date: 03/14/2017
Comments: Soil and Debris Sites 2016 Land Use Controls Inspection and Maintenance Report

Completed Area Name: 4/9 - South AFRL
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction Monitoring Report
Completed Date: 02/15/2017
Comments: South AFRL 2016 Land Use Controls Inspection and Maintenance Report. DTSC has reviewed and has no comments.

Completed Area Name: 5/10 - Operable Units 5 and 10, North Base
Completed Sub Area Name: Site 285
Completed Document Type: Monitoring Report

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Completed Date: 06/28/2017
Comments: Site 285 O&M Report for the Period 10/16 through 09/17

Completed Area Name: 4A - AFRL Area
Completed Sub Area Name: Site 37
Completed Document Type: Monitoring Report
Completed Date: 11/09/2017
Comments: Site 37 SVE O&M and Building 8595 Vapor Intrusion Monitoring Report for 2016

Completed Area Name: 4/9 - South AFRL
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 03/30/2018
Comments: Letter Addendum to the 2016 South AFRL Well Installation Report, Well 13-MW52

Completed Area Name: 7 - Operable Unit 7, Basewide Misc.
Completed Sub Area Name: Site 3
Completed Document Type: Operations and Maintenance Report
Completed Date: 02/11/2019
Comments: Site 3 Annual Remedial Action Status Report, October 2016 through September 2017

Completed Area Name: 8 - 25 Operable Unit - 8 - Site 25 Exotic Fuels
Completed Sub Area Name: Site 25
Completed Document Type: Remedial Investigation Workplan
Completed Date: 08/03/2018
Comments: Site 25 USGS Long-Screen Wells Evaluation Workplan. Although this document wasn't provided in final form until August 3, 2018, it was actually finalized by the USGS in late April or early May 2018. DTSC input was informal and provided via a very accelerated review schedule.

Completed Area Name: 2 - Operable Unit 2, South Base - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Implementation Workplan
Completed Date: 04/20/2018
Comments: Document has been finalized.

Completed Area Name: 2 - Operable Unit 2, South Base - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Workplan
Completed Date: 01/29/2019
Comments: Sites 81 and 102 Removal Action Workplan

Completed Area Name: 5/10 - Operable Units 5 and 10, North Base
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Plan
Completed Date: 10/08/2019
Comments: Basewide GWM SAP Volume IV Long-Term Monitoring Optimization

Completed Area Name: 2 - Operable Unit 2, South Base - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/21/2018
Comments: Final OU2 Sites 5/14 Annual Remedial Action Status Report submitted

EDWARDS AIR FORCE BASE (Continued) **1000155217**

by Air Force on 9/21/18.

Completed Area Name: 4/9 - South AFRL
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/24/2018
Comments: Site 37 SVE O&M and Building 8595 Vapor Intrusion Monitoring Report for 2017

Completed Area Name: 4/9 - Soil and Debris Sites
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction Monitoring Report
Completed Date: 07/16/2018
Comments: Soil and Debris Sites 2017 LUC Inspection and Maintenance Report. DTSC reviewed and had no comments.

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Not reported
Completed Document Type: Well Completion Report
Completed Date: 06/15/2018
Comments: Letter Report Abandonment and Replacement of OU 1 Wells. DTSC reviewed and had no comments.

Completed Area Name: 6 - Operable Unit 6, NASA Dryden
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction Monitoring Report
Completed Date: 06/21/2018
Comments: OU 6 NASA Annual 2017 Land Use Control Report

Completed Area Name: 4/9 Mars Blvd Sites
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/20/2018
Comments: Mars Blvd Sites 2016 Groundwater Monitoring Report

Completed Area Name: 8 - 25 Operable Unit - 8 - Site 25 Exotic Fuels
Completed Sub Area Name: Site 25
Completed Document Type: Technical Report
Completed Date: 12/24/2019
Comments: Site 25 Nitrate/Mineral Source Area Evaluation Tech Memo

Completed Area Name: 4A - AFRL Area
Completed Sub Area Name: Site 37
Completed Document Type: Monitoring Report
Completed Date: 01/03/2020
Comments: Site 37 SVE O&M and Building 8595 Vapor Intrusion Monitoring Report for 2018

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Workplan
Completed Date: 12/26/2019
Comments: Expanded Site Inspection of Aqueous Film Forming Foam Usage Workplan

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 76
Completed Document Type: Monitoring Report

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Completed Date: 12/24/2019
Comments: Final version received on 12/24/19.

Completed Area Name: 7 - Operable Unit 7, Basewide Misc.
Completed Sub Area Name: Site 442
Completed Document Type: Remedial Action Implementation Workplan
Completed Date: 07/24/2019
Comments: Soil Gas Sampling Workplan Addendum, OU 7, Chemical Warfare Material Site 442, Areas 1, 2, and 3

Completed Area Name: 6 - Operable Unit 6, NASA Dryden
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction Monitoring Report
Completed Date: 05/31/2019
Comments: Final OU6 NASA Land Use Restriction Report

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 86
Completed Document Type: Monitoring Report
Completed Date: 12/24/2019
Comments: No Final DTSC letter needed.

Completed Area Name: 8 - 25 Operable Unit - 8 - Site 25 Exotic Fuels
Completed Sub Area Name: Site 25
Completed Document Type: Technical Workplan
Completed Date: 08/16/2019
Comments: Site 25 Tracer Injection Workplan

Completed Area Name: 8 - 25 Operable Unit - 8 - Site 25 Exotic Fuels
Completed Sub Area Name: Site 25
Completed Document Type: Monitoring Report
Completed Date: 03/12/2020
Comments: 2015 Site 25 GMR

Completed Area Name: 7 - Operable Unit 7, Basewide Misc.
Completed Sub Area Name: Site 442
Completed Document Type: 5 Year Review Workplan
Completed Date: 07/24/2019
Comments: 2019 Soil Gas Sampling Workplan for Site 442

Completed Area Name: 5/10 - Operable Units 5 and 10, North Base
Completed Sub Area Name: Site 285
Completed Document Type: Monitoring Report
Completed Date: 01/03/2020
Comments: Site 285 Groundwater Monitoring Report for 2018

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Site 18
Completed Document Type: Monitoring Report
Completed Date: 04/08/2019
Comments: Final Report

Completed Area Name: 7 - Operable Unit 7, Basewide Misc.
Completed Sub Area Name: Site 442
Completed Document Type: Operations and Maintenance Report
Completed Date: 06/25/2019
Comments: Site 442 Annual Remedial Action Stutus Report, October 2017 -

EDWARDS AIR FORCE BASE (Continued) **1000155217**

September 2018

Completed Area Name: 4/9 Mars Blvd Sites
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 05/17/2019
Comments: Sites 6 and 113 Groundwater Monitoring Report for 2018

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Enforceable Schedule
Completed Date: 01/15/2019
Comments: Based on RPM discussions in the November 2018 RPM meeting, the 1st Qtr Update to the FFA schedule was finalized on 1/15/19

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/30/2020
Comments: OU 1/8 GWM and Sampling Report for 2017

Completed Area Name: 4/9 - Northeast AFRL
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/21/2020
Comments: Final document received on 2/21/2020

Completed Area Name: 8 - 25 Operable Unit - 8 - Site 25 Exotic Fuels
Completed Sub Area Name: Not reported
Completed Document Type: Well Installation Workplan
Completed Date: 07/09/2019
Comments: Technical Memorandum for Site 25 Leading Edge Well Installation

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 5
Completed Document Type: Well Completion Report
Completed Date: 03/29/2019
Comments: Document issued only as Final by Air Force

Completed Area Name: 2 - Operable Unit 2, South Base - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/18/2019
Comments: Final version of document submitted by Air Force on 12/18/2019.

Completed Area Name: 4/9 - Soil and Debris Sites
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction Monitoring Report
Completed Date: 05/29/2019
Comments: Soil and Debris Sites 2018 Land Use Controls Inspection and Maintenance Report. DTSC has reviewed and concurs with the report.

Completed Area Name: 5/10 - Operable Units 5 and 10, North Base
Completed Sub Area Name: Site 285
Completed Document Type: Monitoring Report
Completed Date: 04/17/2018
Comments: Site 285 Groundwater Monitoring Report for 2017

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Completed Area Name: 7 - Operable Unit 7, Basewide Misc.
Completed Sub Area Name: Site 3
Completed Document Type: Remedial Action Completion Report
Completed Date: 01/31/2019
Comments: Site 3 Interim Remedial Action Completion Report, Landfill Cap Construction

Completed Area Name: 7 - Operable Unit 7, Basewide Misc.
Completed Sub Area Name: Site 442
Completed Document Type: Operations and Maintenance Report
Completed Date: 07/23/2018
Comments: Site 442 Annual Remedial Action Stutus Report, October 2016 - September 2017

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 5
Completed Document Type: Removal Action Workplan Amendment
Completed Date: 04/20/2018
Comments: Document completed.

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Site 18
Completed Document Type: Monitoring Report
Completed Date: 05/10/2018
Comments: Site 18 DES Annual O&M Report November 2016-October 2017

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 76
Completed Document Type: Monitoring Report
Completed Date: 08/06/2018
Comments: Final OU2 Site 76 ARASR. Laboratory reports (Appendix D.2, PDF 3/3) not uploaded due to size limitation.

Completed Area Name: 4/9 - Soil and Debris Sites
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/13/2018
Comments: Sites 6 and 113 Groundwater Monitoring Report for 2017

Completed Area Name: 6 - Operable Unit 6, NASA Dryden
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Plan
Completed Date: 04/02/2019
Comments: Final OU6 Groundwater SAP received by DTSC on 2 April 2019.

Completed Area Name: 4/9 - Soil and Debris Sites
Completed Sub Area Name: Not reported
Completed Document Type: 5 Year Review Reports
Completed Date: 05/09/2019
Comments: Not reported

Completed Area Name: 8 - 25 Operable Unit - 8 - Site 25 Exotic Fuels
Completed Sub Area Name: Site 25
Completed Document Type: Site Characterization Report
Completed Date: 09/26/2018
Comments: Site 25 Updated Cross Sections and 2016 Groundwater Level Contour Maps Technical Memorandum

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Completed Area Name: 8 - 25 Operable Unit - 8 - Site 25 Exotic Fuels
Completed Sub Area Name: Site 25
Completed Document Type: Site Characterization Workplan
Completed Date: 06/22/2018
Comments: Site 25 Phase II Geophysical Survey Work Plan.

Completed Area Name: 8 - 25 Operable Unit - 8 - Site 25 Exotic Fuels
Completed Sub Area Name: Site 25
Completed Document Type: Well Installation Workplan
Completed Date: 04/06/2017
Comments: Site 25 Plume Leading Edge Monitoring Well Installation Letter Workplan. To install wells to define the leading edge of the Site 25 TCE plume.

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Site 18
Completed Document Type: Monitoring Report
Completed Date: 09/26/2017
Comments: Site 18 DES Annual O&M Report November 2014-October 2016

Completed Area Name: 6 - Operable Unit 6, NASA Dryden
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 06/02/2017
Comments: Final Letter Workplan for OU6 Groundwater Plume Delineation received on 6/1/2017.

Completed Area Name: 7 - Operable Unit 7, Basewide Misc. - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Feasibility Study Report
Completed Date: 11/07/2018
Comments: Final FS Report Addendum, OU7 Sites 272, 280, 293 and 339 received on 2 October 2018.

Completed Area Name: 2 - Operable Unit 2, South Base - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 12/14/2017
Comments: Final OU2 Sites 5/14 Groundwater Contaminant Plume, ARASR, Oct 2015 through Sept 2016 received on 12/14/17.

Completed Area Name: 4/9 - South AFRL
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/01/2018
Comments: Final OU4/9 South AFRL Annual Groundwater Monitoring Report

Completed Area Name: 8 - 25 Operable Unit - 8 - Site 25 Exotic Fuels
Completed Sub Area Name: Site 25
Completed Document Type: Site Characterization Workplan
Completed Date: 06/30/2017
Comments: Site 25 Source Area Soil Gas Sampling Workplan. Workplan to collect soil vapor from the well casings above source area groundwater monitoring wells to obtain recent soil vapor information from the Site 25 source area.

Completed Area Name: 4A - AFRL Arroyos

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/01/2018
Comments: AFRL Arroyos 2016 Groundwater Monitoring Report

Completed Area Name: 4/9 Mars Blvd Sites
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 04/12/2018
Comments: Sites 6 and 113 Groundwater Monitoring Report for 2017

Completed Area Name: 8 - 25 Operable Unit - 8 - Site 25 Exotic Fuels
Completed Sub Area Name: Site 25
Completed Document Type: Site Characterization Workplan
Completed Date: 08/10/2017
Comments: Letter Workplan for Indoor Air Sampling at NASA Buildings 4857 and 4876. DTSC had minor comments on the draft which were addressed by the Air Force in the final report.

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 86
Completed Document Type: Removal Action Workplan
Completed Date: 07/19/2017
Comments: Decision Rule updated for use in future Site 86 documents.

Completed Area Name: 7 - Operable Unit 7, Basewide Misc. - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 03/15/2019
Comments: Final Supplemental RI/FS Report, OU7 Sites 267, 269 and 294.

Completed Area Name: 8 - 25 Operable Unit - 8 - Site 25 Exotic Fuels
Completed Sub Area Name: Site 25
Completed Document Type: Site Characterization Workplan
Completed Date: 10/12/2017
Comments: Site 25 Additional GW Sampling for Nitrate/Minerals and Source Area Evaluation Letter Workplan

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 5
Completed Document Type: Remedial Investigation Workplan
Completed Date: 11/07/2017
Comments: Completed

Completed Area Name: 6 - Operable Unit 6, NASA Dryden
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/28/2017
Comments: Document completed

Completed Area Name: Multiple OUs - MULTIPLE SITES
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 11/01/2019
Comments: While the Air Force titled this document a Remedial Investigation Report, they now are considering it a Site Inspection Report. DTSC has concluded that risks for Site 39 are below action levels and

EDWARDS AIR FORCE BASE (Continued) **1000155217**

concur with a No Further Action for this site. For Site 270, the site qualifies for NFA for chemical contamination; however the Air Force never completed a subsurface investigation for MEC that may have been derived from Site 270 activities because the site is in the active PIRA bombing range. The Air Force will maintain active range health protections (restricting on-site access) and will conduce a munitions investigation should the site ever become deactivated from the range operations.

Completed Area Name: 4/9 - Northeast AFRL
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/27/2018
Comments: OU 4/9 Northeast AFRL 2016 GWM Report

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 05/25/2018
Comments: Site Inspection for Aqueous Film Forming Foam (PFAS/PFOA) Potential Release Areas

Completed Area Name: 8 - 25 Operable Unit - 8 - Site 25 Exotic Fuels
Completed Sub Area Name: Site 25
Completed Document Type: Monitoring Report
Completed Date: 10/19/2018
Comments: Site 25 Groundwater Monitoring Report for 2016

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 07/23/2018
Comments: Groundwater Monitoring Well Installation Report, Sites 17, 19, and 66 (for GW plume extent characterization)

Completed Area Name: 8 - 25 Operable Unit - 8 - Site 25 Exotic Fuels
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 03/14/2018
Comments: Site 25 Letter Report Indoor Air Sampling Buildings 4857 and 4876

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 86
Completed Document Type: Monitoring Report
Completed Date: 08/06/2018
Comments: Final OU2 Site 86 ARASR. All documents uploaded except Apdx C.2, Laboratory Reports.

Completed Area Name: 5/10 - Operable Units 5 and 10, North Base
Completed Sub Area Name: Site 285
Completed Document Type: Monitoring Report
Completed Date: 04/02/2018
Comments: Site 285 GETS Annual Operation and Maintenance (10/16-9/17) Report

Completed Area Name: 8 - 25 Operable Unit - 8 - Site 25 Exotic Fuels
Completed Sub Area Name: Site 25
Completed Document Type: Site Characterization Workplan

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Completed Date: 03/18/2018
Comments: Site 25 Soil Gas Sampling Results Summary and Permeability Test Letter Work Plan

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 5
Completed Document Type: Remedial Investigation Report
Completed Date: 09/13/2018
Comments: Report completed.

Completed Area Name: 8 - 25 Operable Unit - 8 - Site 25 Exotic Fuels
Completed Sub Area Name: Site 25
Completed Document Type: Treatability Study Workplan
Completed Date: 11/06/2018
Comments: Site 25 Source Area Subsurface Permeability and SVE Treatability Study Letter Workplan

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Enforceable Schedule
Completed Date: 10/12/2018
Comments: 2018 Update to the FFA Schedule

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Workplan
Completed Date: 04/22/2019
Comments: Work Plan for Vapor Intrusion Assessment at Buildings 1808, 1810, 1820, 1830, 3500, and 4221

Completed Area Name: 1 - Operable Unit 1, Main Base Flightline
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Plan
Completed Date: 10/12/2018
Comments: OU 1/8 2018 Interim GWM Sampling and Analysis Plan

Completed Area Name: 8 - 25 Operable Unit - 8 - Site 25 Exotic Fuels
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 11/01/2017
Comments: Site 25 Slug Test Technical Memorandum, issued as a final document (no draft version distributed)

Completed Area Name: 8 - 25 Operable Unit - 8 - Site 25 Exotic Fuels
Completed Sub Area Name: Site 25
Completed Document Type: Remedial Investigation Workplan
Completed Date: 06/27/2019
Comments: Site 25 Integrated Workplan Memorandum for High-Resolution Characterization

Completed Area Name: 2 - Operable Unit 2, South Base
Completed Sub Area Name: Site 5
Completed Document Type: Technical Report
Completed Date: 03/29/2019
Comments: Final Version included as Attachment 1 to Site 5 CT Plume Delineation Well Construction Completion Report (29 March 2019).

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Completed Area Name: 4/9 - South AFRL
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 11/21/2019
Comments: Final document received on 11/21/2019.

Completed Area Name: 4A - AFRL Arroyos
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/04/2020
Comments: Final document received 2/4/2020.

Completed Area Name: 4/9 Mars Blvd Sites
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/31/2020
Comments: Mars Blvd Sites 2017 GWM Report

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Enforceable Schedule
Completed Date: 10/10/2019
Comments: 2019 Update to the FFA Schedule

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 11/23/2019
Comments: Evaluation of Long-Screen Wells influence on water level (potentiometric surface) contouring. DTSC provided input in comments on the 2017 OU 1/8 GMR.

Completed Area Name: 6 - Operable Unit 6, NASA Dryden
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction
Completed Date: 10/19/2006
Comments: OU-6 ROD included Land Use Controls to prevent exposure to groundwater during cleanup. Extraction of groundwater for use other than monitoring is prohibited.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Federal Facility Agreement
Completed Date: 10/31/1990
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 08/24/1981
Comments: Facility Identified: EPA Superfund Notification List.

Completed Area Name: 4A - AFRL Area
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction
Completed Date: 09/26/2007
Comments: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Future Area Name:	5/10 - Operable Units 5 and 10, North Base
Future Sub Area Name:	Not reported
Future Document Type:	Record of Decision
Future Due Date:	2024
Future Area Name:	4/9 - Northeast AFRL
Future Sub Area Name:	Not reported
Future Document Type:	Feasibility Study Report
Future Due Date:	2023
Future Area Name:	4/9 Mars Blvd Sites
Future Sub Area Name:	Not reported
Future Document Type:	Feasibility Study Report
Future Due Date:	2023
Future Area Name:	1 - Operable Unit 1, Main Base Flightline
Future Sub Area Name:	Not reported
Future Document Type:	Feasibility Study Report
Future Due Date:	2021
Future Area Name:	2 - Operable Unit 2, South Base - MULTIPLE SITES
Future Sub Area Name:	Not reported
Future Document Type:	Record of Decision
Future Due Date:	2021
Future Area Name:	6 - Operable Unit 6, NASA Dryden
Future Sub Area Name:	Not reported
Future Document Type:	5 Year Review Reports
Future Due Date:	2021
Future Area Name:	PROJECT WIDE
Future Sub Area Name:	Not reported
Future Document Type:	Certification
Future Due Date:	2025
Schedule Area Name:	4A - AFRL Arroyos
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Record of Decision
Schedule Due Date:	04/29/2021
Schedule Revised Date:	Not reported
Schedule Area Name:	7 - Operable Unit 7, Basewide Misc.
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Record of Decision
Schedule Due Date:	12/31/2019
Schedule Revised Date:	08/03/2025
Schedule Area Name:	4/9 - South AFRL
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Record of Decision w/ESD
Schedule Due Date:	03/30/2019
Schedule Revised Date:	09/14/2020
Schedule Area Name:	PROJECT WIDE
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Site Characterization Report
Schedule Due Date:	07/01/2017
Schedule Revised Date:	Not reported
Schedule Area Name:	Military Munitions Response Program (MMRP) - Basewide
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Site Characterization Report
Schedule Due Date:	03/31/2018
Schedule Revised Date:	08/24/2020
Schedule Area Name:	4/9 - South AFRL
Schedule Sub Area Name:	Not reported
Schedule Document Type:	5 Year Review Reports
Schedule Due Date:	11/30/2018

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Schedule Revised Date: Not reported
Schedule Area Name: PROJECT WIDE
Schedule Sub Area Name: Not reported
Schedule Document Type: 5 Year Review Reports
Schedule Due Date: 10/24/2019
Schedule Revised Date: 07/24/2020
Schedule Area Name: 1 - Operable Unit 1, Main Base Flightline
Schedule Sub Area Name: Site 16
Schedule Document Type: Site Characterization Report
Schedule Due Date: 06/12/2019
Schedule Revised Date: 08/28/2020
Schedule Area Name: 2 - Operable Unit 2, South Base
Schedule Sub Area Name: Site 29
Schedule Document Type: Record of Decision w/ESD
Schedule Due Date: 12/30/2018
Schedule Revised Date: 09/29/2020
Schedule Area Name: Military Munitions Response Program (MMRP) - Basewide
Schedule Sub Area Name: Not reported
Schedule Document Type: Remedial Investigation / Feasibility Study
Schedule Due Date: 05/30/2019
Schedule Revised Date: 08/28/2020
Schedule Area Name: 2 - Operable Unit 2, South Base
Schedule Sub Area Name: Site 5
Schedule Document Type: Feasibility Study Report
Schedule Due Date: 10/27/2020
Schedule Revised Date: 01/04/2023
Schedule Area Name: 8 - 25 Operable Unit - 8 - Site 25 Exotic Fuels
Schedule Sub Area Name: Site 25
Schedule Document Type: Feasibility Study Report
Schedule Due Date: 12/26/2020
Schedule Revised Date: Not reported
Schedule Area Name: PROJECT WIDE
Schedule Sub Area Name: Not reported
Schedule Document Type: Site Characterization Report
Schedule Due Date: 12/16/2020
Schedule Revised Date: Not reported

Calsite:
Name: EDWARDS AIR FORCE BASE
Address: 470 SQ MI; 60 MI NE OF LOS ANGELES, CA
City: EDWARDS
Region: SACRAMENTO
Facility ID: 15970001
Facility Type: OPEN
Type: OPEN MILITARY BASE
Branch: NO
Branch Name: OMF-NORTHERN CALIF
File Name: Not reported
State Senate District: 05011986
Status: ANNUAL WORKPLAN (AWP) - ACTIVE SITE
Status Name: ANNUAL WORKPLAN - ACTIVE SITE
Lead Agency: DEPT OF TOXIC SUBSTANCES CONTROL
NPL: Listed
SIC Code: 97
SIC Name: NATIONAL SECURITY/INTERNATIONAL AFFAIRS
Access: Not reported
Cortese: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Hazardous Ranking Score:	Not reported
Date Site Hazard Ranked:	Not reported
Groundwater Contamination:	Confirmed
Staff Member Responsible for Site:	JOKANE
Supervisor Responsible for Site:	Not reported
Region Water Control Board:	LN
Region Water Control Board Name:	LAHONTAN
Lat/Long Direction:	Not reported
Lat/Long (dms):	0 0 0 / 0 0 0
Lat/long Method:	Not reported
Lat/Long Description:	MEASURED FROM CENTER POINT OF RUNWAY
State Assembly District Code:	34
State Senate District Code:	18
Facility ID:	15970001
Activity:	RIFS
Activity Name:	REMEDIAL INVESTIGATION / FEASIBILITY STUDY
AWP Code:	OU10
Proposed Budget:	0
AWP Completion Date:	07012007
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	RAP
Activity Name:	REMEDIAL ACTION PLAN / RECORD OF DECISION
AWP Code:	OU9
Proposed Budget:	0
AWP Completion Date:	07012007
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	RIFS
Activity Name:	REMEDIAL INVESTIGATION / FEASIBILITY STUDY
AWP Code:	OU9
Proposed Budget:	0
AWP Completion Date:	07012006
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	RAP
Activity Name:	REMEDIAL ACTION PLAN / RECORD OF DECISION
AWP Code:	OU8
Proposed Budget:	0
AWP Completion Date:	07012007
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	RIFS
Activity Name:	REMEDIAL INVESTIGATION / FEASIBILITY STUDY
AWP Code:	OU8
Proposed Budget:	0

EDWARDS AIR FORCE BASE (Continued) **1000155217**

AWP Completion Date:	07012006
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	RIFS
Activity Name:	REMEDIAL INVESTIGATION / FEASIBILITY STUDY
AWP Code:	OU7
Proposed Budget:	0
AWP Completion Date:	12312006
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	RAP
Activity Name:	REMEDIAL ACTION PLAN / RECORD OF DECISION
AWP Code:	OU5
Proposed Budget:	0
AWP Completion Date:	07012007
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	RIFS
Activity Name:	REMEDIAL INVESTIGATION / FEASIBILITY STUDY
AWP Code:	OU5
Proposed Budget:	0
AWP Completion Date:	07012006
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	RIFS
Activity Name:	REMEDIAL INVESTIGATION / FEASIBILITY STUDY
AWP Code:	OU4
Proposed Budget:	0
AWP Completion Date:	06302006
Revised Due Date:	08302005
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Unknown Type:	0
Facility ID:	15970001
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	S426
Proposed Budget:	0
AWP Completion Date:	08062004
Revised Due Date:	Not reported
Comments Date:	08062004
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	RIFS
Activity Name:	REMEDIAL INVESTIGATION / FEASIBILITY STUDY
AWP Code:	OU1
Proposed Budget:	0
AWP Completion Date:	12012005
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	RIFS
Activity Name:	REMEDIAL INVESTIGATION / FEASIBILITY STUDY
AWP Code:	OU6
Proposed Budget:	0
AWP Completion Date:	09302004
Revised Due Date:	Not reported
Comments Date:	10152004

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	OM
Activity Name:	OPERATION & MAINTENANCE
AWP Code:	S172
Proposed Budget:	0
AWP Completion Date:	06302003
Revised Due Date:	Not reported
Comments Date:	06302003
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	S133
Proposed Budget:	0
AWP Completion Date:	06272003
Revised Due Date:	Not reported
Comments Date:	06272003
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	STE25
Proposed Budget:	0
AWP Completion Date:	05132003
Revised Due Date:	Not reported
Comments Date:	05132003
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	PEA
Activity Name:	PRELIMINARY ENDANGERMENT ASSESSMENT
AWP Code:	PRL32
Proposed Budget:	0
AWP Completion Date:	06282002
Revised Due Date:	Not reported
Comments Date:	06282002
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	PEA

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Activity Name:	PRELIMINARY ENDANGERMENT ASSESSMENT
AWP Code:	PRL31
Proposed Budget:	0
AWP Completion Date:	06282002
Revised Due Date:	Not reported
Comments Date:	06282002
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	PEA
Activity Name:	PRELIMINARY ENDANGERMENT ASSESSMENT
AWP Code:	PRL30
Proposed Budget:	0
AWP Completion Date:	06282002
Revised Due Date:	Not reported
Comments Date:	06282002
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	PEA
Activity Name:	PRELIMINARY ENDANGERMENT ASSESSMENT
AWP Code:	PRL29
Proposed Budget:	0
AWP Completion Date:	03292002
Revised Due Date:	Not reported
Comments Date:	03292002
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	PEA
Activity Name:	PRELIMINARY ENDANGERMENT ASSESSMENT
AWP Code:	PRL28
Proposed Budget:	0
AWP Completion Date:	03292002
Revised Due Date:	Not reported
Comments Date:	03292002
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	PEA
Activity Name:	PRELIMINARY ENDANGERMENT ASSESSMENT
AWP Code:	PRL27
Proposed Budget:	0
AWP Completion Date:	03292002
Revised Due Date:	Not reported
Comments Date:	03292002
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	RAW
Activity Name:	REMOVAL ACTION WORKPLAN
AWP Code:	S426
Proposed Budget:	0
AWP Completion Date:	10112001
Revised Due Date:	Not reported
Comments Date:	10112001
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	PEA
Activity Name:	PRELIMINARY ENDANGERMENT ASSESSMENT
AWP Code:	PRL26
Proposed Budget:	0
AWP Completion Date:	12132001
Revised Due Date:	Not reported
Comments Date:	12132001
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	PEA
Activity Name:	PRELIMINARY ENDANGERMENT ASSESSMENT
AWP Code:	PRL25
Proposed Budget:	0

EDWARDS AIR FORCE BASE (Continued) **1000155217**

AWP Completion Date:	12132001
Revised Due Date:	Not reported
Comments Date:	12132001
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	PEA
Activity Name:	PRELIMINARY ENDANGERMENT ASSESSMENT
AWP Code:	PRL24
Proposed Budget:	0
AWP Completion Date:	12132001
Revised Due Date:	Not reported
Comments Date:	12132001
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	PEA
Activity Name:	PRELIMINARY ENDANGERMENT ASSESSMENT
AWP Code:	PRL23
Proposed Budget:	0
AWP Completion Date:	09172001
Revised Due Date:	Not reported
Comments Date:	09172001
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	PEA
Activity Name:	PRELIMINARY ENDANGERMENT ASSESSMENT
AWP Code:	PRL22
Proposed Budget:	0
AWP Completion Date:	09172001
Revised Due Date:	Not reported
Comments Date:	09172001
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	PEA
Activity Name:	PRELIMINARY ENDANGERMENT ASSESSMENT
AWP Code:	PRL21
Proposed Budget:	0
AWP Completion Date:	09172001
Revised Due Date:	Not reported
Comments Date:	09172001
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Unknown Type:	0
Facility ID:	15970001
Activity:	PEA
Activity Name:	PRELIMINARY ENDANGERMENT ASSESSMENT
AWP Code:	PRL20
Proposed Budget:	0
AWP Completion Date:	06112001
Revised Due Date:	Not reported
Comments Date:	06112001
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	PEA
Activity Name:	PRELIMINARY ENDANGERMENT ASSESSMENT
AWP Code:	PRL19
Proposed Budget:	0
AWP Completion Date:	06082001
Revised Due Date:	Not reported
Comments Date:	06082001
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	RAW
Activity Name:	REMOVAL ACTION WORKPLAN
AWP Code:	STE25
Proposed Budget:	0
AWP Completion Date:	12042000
Revised Due Date:	Not reported
Comments Date:	12042000

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	PEA
Activity Name:	PRELIMINARY ENDANGERMENT ASSESSMENT
AWP Code:	PRL18
Proposed Budget:	0
AWP Completion Date:	03152001
Revised Due Date:	Not reported
Comments Date:	03152001
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	PEA
Activity Name:	PRELIMINARY ENDANGERMENT ASSESSMENT
AWP Code:	PRL17
Proposed Budget:	0
AWP Completion Date:	03152001
Revised Due Date:	Not reported
Comments Date:	03152001
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	PEA
Activity Name:	PRELIMINARY ENDANGERMENT ASSESSMENT
AWP Code:	PRL16
Proposed Budget:	0
AWP Completion Date:	03152001
Revised Due Date:	Not reported
Comments Date:	03152001
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	PEA
Activity Name:	PRELIMINARY ENDANGERMENT ASSESSMENT
AWP Code:	PRL15
Proposed Budget:	0
AWP Completion Date:	02072001
Revised Due Date:	Not reported
Comments Date:	02072001
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	PEA

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Activity Name:	PRELIMINARY ENDANGERMENT ASSESSMENT
AWP Code:	PRL14
Proposed Budget:	0
AWP Completion Date:	02072001
Revised Due Date:	Not reported
Comments Date:	02072001
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	PEA
Activity Name:	PRELIMINARY ENDANGERMENT ASSESSMENT
AWP Code:	PRL13
Proposed Budget:	0
AWP Completion Date:	02082001
Revised Due Date:	Not reported
Comments Date:	02082001
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	DES
Activity Name:	DESIGN
AWP Code:	STE18
Proposed Budget:	0
AWP Completion Date:	08021999
Revised Due Date:	Not reported
Comments Date:	08021999
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	PEA
Activity Name:	PRELIMINARY ENDANGERMENT ASSESSMENT
AWP Code:	PRL12
Proposed Budget:	0
AWP Completion Date:	04212000
Revised Due Date:	Not reported
Comments Date:	04212000
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	PEA
Activity Name:	PRELIMINARY ENDANGERMENT ASSESSMENT
AWP Code:	PRL11
Proposed Budget:	0
AWP Completion Date:	01052000
Revised Due Date:	Not reported
Comments Date:	01052000
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	PEA
Activity Name:	PRELIMINARY ENDANGERMENT ASSESSMENT
AWP Code:	PRL10
Proposed Budget:	0
AWP Completion Date:	01052000
Revised Due Date:	Not reported
Comments Date:	01052000
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	PEA
Activity Name:	PRELIMINARY ENDANGERMENT ASSESSMENT
AWP Code:	PRL9
Proposed Budget:	0
AWP Completion Date:	09291999
Revised Due Date:	Not reported
Comments Date:	09291999
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	PEA
Activity Name:	PRELIMINARY ENDANGERMENT ASSESSMENT
AWP Code:	PRL8
Proposed Budget:	0

EDWARDS AIR FORCE BASE (Continued) **1000155217**

AWP Completion Date:	09291999
Revised Due Date:	Not reported
Comments Date:	09291999
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	PEA
Activity Name:	PRELIMINARY ENDANGERMENT ASSESSMENT
AWP Code:	PRL7
Proposed Budget:	0
AWP Completion Date:	02261999
Revised Due Date:	Not reported
Comments Date:	02261999
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	DES
Activity Name:	DESIGN
AWP Code:	S223
Proposed Budget:	0
AWP Completion Date:	02021999
Revised Due Date:	Not reported
Comments Date:	02021999
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	DES
Activity Name:	DESIGN
AWP Code:	SIT14
Proposed Budget:	0
AWP Completion Date:	02011999
Revised Due Date:	Not reported
Comments Date:	02011999
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	PEA
Activity Name:	PRELIMINARY ENDANGERMENT ASSESSMENT
AWP Code:	B8595
Proposed Budget:	0
AWP Completion Date:	01281999
Revised Due Date:	Not reported
Comments Date:	01281999
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Unknown Type:	0
Facility ID:	15970001
Activity:	PEA
Activity Name:	PRELIMINARY ENDANGERMENT ASSESSMENT
AWP Code:	PRL6
Proposed Budget:	0
AWP Completion Date:	10011998
Revised Due Date:	Not reported
Comments Date:	10011998
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	SRAM
Proposed Budget:	0
AWP Completion Date:	08031998
Revised Due Date:	Not reported
Comments Date:	08031998
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	REMOVAL ACTION CONSISTED OF DESTRUCTION OF SHORT RANGE ATTACK MISSLE MOTOR.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	OM
Activity Name:	OPERATION & MAINTENANCE
AWP Code:	OU-6
Proposed Budget:	0
AWP Completion Date:	04271999
Revised Due Date:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Comments Date:	04271999
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	RAW
Activity Name:	REMOVAL ACTION WORKPLAN
AWP Code:	S133
Proposed Budget:	0
AWP Completion Date:	10172000
Revised Due Date:	Not reported
Comments Date:	10172000
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	PEA
Activity Name:	PRELIMINARY ENDANGERMENT ASSESSMENT
AWP Code:	PRL5
Proposed Budget:	0
AWP Completion Date:	10011998
Revised Due Date:	Not reported
Comments Date:	10011998
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	PEA
Activity Name:	PRELIMINARY ENDANGERMENT ASSESSMENT
AWP Code:	PRL4
Proposed Budget:	0
AWP Completion Date:	07291998
Revised Due Date:	Not reported
Comments Date:	07291998
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	PEA
Activity Name:	PRELIMINARY ENDANGERMENT ASSESSMENT
AWP Code:	PRL1
Proposed Budget:	0
AWP Completion Date:	12121996
Revised Due Date:	Not reported
Comments Date:	12121996
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	S223
Proposed Budget:	0
AWP Completion Date:	06011999
Revised Due Date:	Not reported
Comments Date:	06011999
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	SIT14
Proposed Budget:	0
AWP Completion Date:	06111999
Revised Due Date:	Not reported
Comments Date:	06111999
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	SIT29
Proposed Budget:	0
AWP Completion Date:	06041998
Revised Due Date:	Not reported
Comments Date:	06041998
Est Person-Yrs to complete:	0
Estimated Size:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	X
Removal Action Certification:	N
Activity Comments:	REMOVAL ACTION CONSISTED OF FENCING THE SITE FOR ACCESS RESTRICTION AND CONDUCTING LONG-TERM GROUNDWATER MONITORING.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	RAW
Activity Name:	REMOVAL ACTION WORKPLAN
AWP Code:	S223
Proposed Budget:	0
AWP Completion Date:	05071998
Revised Due Date:	Not reported
Comments Date:	05071998
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	RAW
Activity Name:	REMOVAL ACTION WORKPLAN
AWP Code:	SIT14
Proposed Budget:	0
AWP Completion Date:	05071998
Revised Due Date:	Not reported
Comments Date:	05071998
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	RAW
Activity Name:	REMOVAL ACTION WORKPLAN
AWP Code:	SIT29
Proposed Budget:	0
AWP Completion Date:	05071998
Revised Due Date:	Not reported
Comments Date:	05071998
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	RIFS
Activity Name:	REMEDIAL INVESTIGATION / FEASIBILITY STUDY
AWP Code:	OU2
Proposed Budget:	0
AWP Completion Date:	11302005
Revised Due Date:	04302005
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	X
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	RA
Activity Name:	REMOVAL ACTION

EDWARDS AIR FORCE BASE (Continued) **1000155217**

AWP Code:	5&15
Proposed Budget:	0
AWP Completion Date:	12101997
Revised Due Date:	Not reported
Comments Date:	12101997
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	INITIAL OPERATION OF THE DUAL EXTRACTION SYSTEM TO REMEDIATE VOC CONTAMINATION COMMENCED ON 4/10/97. AMOUNTS SHOWN ARE FOR THE INITIAL 3 MONTHS OF OPERATION.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	7&167
Proposed Budget:	0
AWP Completion Date:	06301997
Revised Due Date:	Not reported
Comments Date:	06301997
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	8482
Liquids Treated (Gals):	8482
Action Included Capping:	X
Well Decommissioned:	Not reported
Action Included Fencing:	X
Removal Action Certification:	N
Activity Comments:	BERYLLIUM CONTAMINATED SOILS WERE EXCAVATED AND DEPOSITED ON-SITE UNDER THE DTSC CAMU REGULATIONS AND IN ACCORDANCE WITH THE ARARS CONTAINED IN 23 CCR, CHAPTER 15.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	SIT16
Proposed Budget:	0
AWP Completion Date:	06301997
Revised Due Date:	Not reported
Comments Date:	06301997

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	INITIAL OPERATION OF THE DULA EXTRACTION SYSTEM BEGAN ON MARCH 18. BASED ON BIMONTHLY MONITORING REPORTS, THE SYSTEM APPEARS TO BE OPERATING PROPERLY. CONTINUED OPERATION WILL BE CONDUCTED UNDER OM.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	SIT45
Proposed Budget:	0
AWP Completion Date:	05221997
Revised Due Date:	Not reported
Comments Date:	05221997
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	THE SITE 45 RA CONSISTS OF DTSC'S APPROVAL THAT THE DUAL VAPOR/ GROUNDWATER EXTRACTION SYSTEM IS OPERATING SATISFACTORILY AND THAT THE SYSTEM IS NOW CONSIDERED TO BE IN AN OPERATION AND MAINTENANCE MODE.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	RAP
Activity Name:	REMEDIAL ACTION PLAN / RECORD OF DECISION
AWP Code:	5&15
Proposed Budget:	0
AWP Completion Date:	06301997
Revised Due Date:	Not reported
Comments Date:	06301997
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	RAP
Activity Name:	REMEDIAL ACTION PLAN / RECORD OF DECISION
AWP Code:	SIT18
Proposed Budget:	0
AWP Completion Date:	05291997
Revised Due Date:	Not reported
Comments Date:	05291997
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	RAP
Activity Name:	REMEDIAL ACTION PLAN / RECORD OF DECISION
AWP Code:	SIT16
Proposed Budget:	0
AWP Completion Date:	09301996
Revised Due Date:	Not reported
Comments Date:	09301996
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0

EDWARDS AIR FORCE BASE (Continued) **1000155217**

For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	RAP
Activity Name:	REMEDIAL ACTION PLAN / RECORD OF DECISION
AWP Code:	SIT45
Proposed Budget:	0
AWP Completion Date:	09301996
Revised Due Date:	Not reported
Comments Date:	09301996
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	RAP
Activity Name:	REMEDIAL ACTION PLAN / RECORD OF DECISION
AWP Code:	7&167
Proposed Budget:	0
AWP Completion Date:	09301996
Revised Due Date:	Not reported
Comments Date:	09301996
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	PPP
Activity Name:	PUBLIC PARTICIPATION PLAN
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	05311994
Revised Due Date:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Comments Date:	05311994
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	OU1FP
Proposed Budget:	0
AWP Completion Date:	01301993
Revised Due Date:	Not reported
Comments Date:	01301993
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	INSTALLATION, DEVELOPMENT AND ACTIVATION OF SIX SCAVENGER PUMPS TO REMOVE FREE JP-4 FUEL PRODUCT FROM THE GROUNDWATER SURFACE AT SITE 16.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	OU1BV
Proposed Budget:	0
AWP Completion Date:	01301993
Revised Due Date:	Not reported
Comments Date:	01301993
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	REMOVAL OF JP-4 FUEL IN THE VADOSE ZONE BY INJECTION OF AIR UNDER-GROUND TO PROVIDE OXYGEN TO NATIVE BACTERIA WHICH FEED ON PETROLEUM HYDROCARBONS.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	OU1PR
Proposed Budget:	0
AWP Completion Date:	01301992
Revised Due Date:	Not reported
Comments Date:	01301992
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	CONSTRUCTION OF A NEW JP-4 JET FUEL PIPELINE TO REPLACE EXISTING PIPE-LINE FROM FUEL TANK FARM TO FLIGHT LINE WITH DOUBLE-WALLED PIPE WITHLEAK DETECTORS.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	PPP
Activity Name:	PUBLIC PARTICIPATION PLAN
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	04301991
Revised Due Date:	Not reported
Comments Date:	04301991
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	SS
Activity Name:	SITE SCREENING
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	02101987
Revised Due Date:	Not reported
Comments Date:	02101987
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	CERT
Activity Name:	CERTIFICATION
AWP Code:	BASWD
Proposed Budget:	0
AWP Completion Date:	12312010
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	15970001
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	FFA
Proposed Budget:	0

EDWARDS AIR FORCE BASE (Continued) **1000155217**

AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	10311990
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Alternate Address:	SOUTH OF HIGHWAY 58
Alternate City,St,Zip:	MOJAVE, CA 93501
Alternate Address:	470 SQ MI; 60 MI NE OF LOS ANGELES, CA
Alternate City,St,Zip:	EDWARDS, CA 93523
Alternate Address:	6510 ABG/CC
Alternate City,St,Zip:	EDWARDS, CA 93523
Alternate Address:	AFFTC EDWARDS AFB
Alternate City,St,Zip:	EDWARDS, CA 93523
Alternate Address:	NE OF THE CITY OF LANCASTER
Alternate City,St,Zip:	MOJAVE, CA 93501
Background Info:	Edwards Air Force Base is an Air Force Command Test Center. The primary function of Edwards is to test new and existing air- craft and integrate them into the present Air Force inventory. The land area occupied by the base is 470 square miles. Within this land area there are 3 separate Air Force Bases, complete with runways and infrastructure; the NASA Dryden Flight Test and Space Shuttle Recovery facilities; the 50+ square mile Phillips Laboratory rocket test facility; the Precision Impact Range Area; and the Rogers and Rosamond Dry Lake Beds. In the past, the base was the home of the U.S. Army Helicopter Flight Test Center and the NASA Jet Propulsion Laboratory. During World War II, the base trained P-38 fighter pilots and B-24 bombe crews. After World War II, the base became a flight test center. The 469 discovered contaminated sites are divided into 10 Operable Units (OU): OU-1, Main Base Flightline; OU-2, South Base; OU-3, Basewide Water Wells; OU-4, Phillips Laboratory;OU-5, NASA/Jet Propulsion Laboratory; OU-6, NASA/Dryden; OU-7, Basewide Miscellaneous; OU-8, NW Main Base Flightline; OU-9, Phillips Lab- oratory (East); and OU-10, North Base. There is an extensive Archival Research Program underway to locate information leading to the identification of potential past chemical weapon activity on the base (40 + or - sites suspected). There is also an Under- ground Storage Tank removal program (700 USTs removed). In the summer of 1989, EPA listed Edwards on the National Priority List. A Federal Facility Agreement (FFA) between Edwards, EPA, RWQCB, and DTSC was negotiated and became effective in October 1990.
Comments Date:	01052000
Comments:	PEA - PRL10 -- Concurrance provided on PEA equivalent documents f

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Comments Date:	01052000
Comments:	or OU-4, areas of concern 122, 141, 170, and 171. PEA - PRL11 --
Comments Date:	01052000
Comments:	Concurrance provided on PEA equivalent document for OU-5, area of
Comments Date:	01052000
Comments:	concern 233.
Comments Date:	01281999
Comments:	PEA - B8595 -- Investigation and closure of AOC's 170-172 in Buil
Comments Date:	01281999
Comments:	ding 8595 in OU-4.
Comments Date:	01301992
Comments:	RA (OU1PR): Construction of a new JP-4 jet fuel pipeline to repla
Comments Date:	01301992
Comments:	ce existing pipeline from fuel tank farm to flight line (4.5 mile
Comments Date:	01301992
Comments:	s) with double-walled pipe and leak detectors. No contaminated so
Comments Date:	01301992
Comments:	il was removed with this action.
Comments Date:	01301993
Comments:	RA (OU1BV): Removal of JP-4 fuel in the vadose zone by injection
Comments Date:	01301993
Comments:	of air underground to provide oxygen to native bacteria which fee
Comments Date:	01301993
Comments:	d on petroleum hydrocarbons. This process is being employed at S
Comments Date:	01301993
Comments:	ite 16 - Fuel Spill and at Site 21 - Jet Engine test cell facilit
Comments Date:	01301993
Comments:	y. RA (OU1FP): Installation, development and activation of six s
Comments Date:	01301993
Comments:	cavenger pumps to remove free product from the groundwater surfac
Comments Date:	01301993
Comments:	e at Site 16.
Comments Date:	02011999
Comments:	DES - SIT14 -- Design for installing, operating, and evaluating t
Comments Date:	02011999
Comments:	he groundwater extraction and treatment system at Site 14 in OU-2
Comments Date:	02011999
Comments:	.
Comments Date:	02021999
Comments:	DES - S223 -- Design for installing, operating and evaluating the
Comments Date:	02021999
Comments:	SVE and air sparging systems at Site 223 in OU-2.
Comments Date:	02072001
Comments:	PEA - PRL14 -- Concurrence provided on PEA equivalent documents f
Comments Date:	02072001
Comments:	or Operable Unit #10, Area of Concern 243. PEA - PRL15 -- Concu
Comments Date:	02072001
Comments:	rrence provided on PEA equivalent documents for Operable Unit #1,
Comments Date:	02072001
Comments:	Sites 46, 55 and 366.
Comments Date:	02081983
Comments:	Records Search: HWMB/Enforcement actively involved.
Comments Date:	02082001
Comments:	PEA - PRL13 -- Concurrence provided on PEA equivalent documents f
Comments Date:	02082001
Comments:	or Operable Unit #4, Site 12 and Areas of Concern 121, 155 and 16
Comments Date:	02082001

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Comments:	4.
Comments Date:	02101987
Comments:	Site Screening Done.
Comments Date:	02261999
Comments:	PEA - PRL7 -- Concurrance provided on PEA - equivalent documents
Comments Date:	02261999
Comments:	for OU-10 sites 228, 232, and 256.
Comments Date:	03152001
Comments:	PEA - PRL16 -- Concurrence provided on PEA equivalent documents f
Comments Date:	03152001
Comments:	or Operable Unit #4, Site 150 and Area of Concern 168. PEA - PR
Comments Date:	03152001
Comments:	L17 -- Concurrence provided on PEA equivalent documents for Opera
Comments Date:	03152001
Comments:	ble Unit #7 Sites 4 and 34 and Areas of Concern 388 and 394. PE
Comments Date:	03152001
Comments:	A - PRL18 -- Concurrence provided on PEA equivalent documents for
Comments Date:	03152001
Comments:	Operable Unit #8,Site 2.
Comments Date:	03292002
Comments:	PEA - PRL27 -- No Further Investigation (NFI) documents signed by
Comments Date:	03292002
Comments:	the Edwards Air Force Base Remedial Project Manager for Operable
Comments Date:	03292002
Comments:	Unit 4- Air Force Research Laboratory Site Number 146 and for Op
Comments Date:	03292002
Comments:	erable Unit 9 - East Air Force Research Laboratory Site Number 37
Comments Date:	03292002
Comments:	6. The NFI determination for these site-specific actions means t
Comments Date:	03292002
Comments:	hat these Sites have been adequately investigated and that the re
Comments Date:	03292002
Comments:	sults justify the determination. PEA - PRL28 -- No Further Inve
Comments Date:	03292002
Comments:	stigation (NFI) documents signed by the Edwards Air Force Base Re
Comments Date:	03292002
Comments:	medial Project Manager for Operable Unit 7 - Basewide Miscellaneo
Comments Date:	03292002
Comments:	us Site Number 353 and Area of Concern (AOC) Numbers 268,368 and
Comments Date:	03292002
Comments:	371. The NFI determination for these site-specific actions means
Comments Date:	03292002
Comments:	that these Sites/AOCs have been adequately investigated and that
Comments Date:	03292002
Comments:	the results justify the determination. PEA - PRL29 -- No Furth
Comments Date:	06302003
Comments:	apor from seven wells. The cumulative mass of contaminants remov
Comments Date:	06302003
Comments:	ed during the reporting period was 472 pounds. Vapor flow rates
Comments Date:	06302003
Comments:	averaged approximately 42 standard cubic feet per minute (scfm) d
Comments Date:	06302003
Comments:	uring January to August 2002, and 84 scfm during September to Dec
Comments Date:	06302003
Comments:	ember 2002 following expansion of the well field from three to se
Comments Date:	06302003
Comments:	ven wells. The SVE operating cost for the year 2002, excluding l

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Comments Date:	06302003
Comments:	abor, was $95,172.
Comments Date:	07291998
Comments:	PEA - PRL4 -- Edwards AFB has adequately investigated the OU-2 Ol
Comments Date:	07291998
Comments:	d South Base PRL sites 72, 73, 78, 79, 84, 87, 98, 100, 101, 104,
Comments Date:	07291998
Comments:	290, 291 and 417 (collectively, PRL4) DTSC finds that the docume
Comments Date:	07291998
Comments:	nts are equivalent to a PEA document.
Comments Date:	08021999
Comments:	DES - STE18 -- Approval of dual extraction system design for inte
Comments Date:	08021999
Comments:	rim removal action to treat TCE contaminated soil and groundwater
Comments Date:	08021999
Comments:	.
Comments Date:	08031998
Comments:	RA - SRAM -- Time critical removal action taken to destroy short
Comments Date:	08031998
Comments:	range attack missile motor.
Comments Date:	08062004
Comments:	RA - S426 -- No Further Action recommendation following the compl
Comments Date:	08062004
Comments:	etion of a removal action at Site 426 in OU-7, documented in the
Comments Date:	08062004
Comments:	Site Interim Removal Action Report, March 2004. Site 426 is an h
Comments Date:	08062004
Comments:	istoric WWII Chemical Warfare Material Storage Yard near dormitor
Comments Date:	08062004
Comments:	ies where investigation delineated frou possible "trenches." An
Comments Date:	08062004
Comments:	excavation removal action conducted in 2002 identified no hazardo
Comments Date:	08062004
Comments:	us contaminants, only four sets of concrete "rails" which were re
Comments Date:	08062004
Comments:	moved.
Comments Date:	08241981
Comments:	Facility Identified: EPA Superfund Notification List.
Comments Date:	09172001
Comments:	PEA - PRL21 -- Concurrence provided on PEA equivalent document fo
Comments Date:	09172001
Comments:	r OU7, AOCs 261, 262, 263, 264, and 265. PEA - PRL22 -- Concurr
Comments Date:	09172001
Comments:	ence provided on PEA equivalent document for OU10, Site 279. PE
Comments Date:	09172001
Comments:	A - PRL23 -- Concurrence provided on PEA equivalent document for
Comments Date:	09172001
Comments:	OU2, AOCs 458, 459, and 460.
Comments Date:	09281999
Comments:	PEA - PRL8 -- Concurrence provided on PEA equivalent documents
Comments Date:	09281999
Comments:	for OU-3, Sites 409, 410, 411, and 416.
Comments Date:	09281999
Comments:	PEA - PRL9 -- Concurrence provided on PEA equivalent documents
Comments Date:	09281999
Comments:	for OU-2, Sites 105, 109, 111, and 364.
Comments Date:	10011998

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Comments:	PEA - PRL5 -- EAFB has adequately investigated the OU-5 NASA Jet
Comments Date:	10011998
Comments:	Propulsion laboratory PRL Sites 195, 200, 201, 243, 289 and 350 (
Comments Date:	10011998
Comments:	collectively, PRL5). DTSC finds that the documents are equivalen
Comments Date:	10011998
Comments:	t to a PEA document. PEA - PRL6 -- EAFB has adequately investig
Comments Date:	10011998
Comments:	ated the OU-2 Old South Base PRL Sites 75, 77, 89, 95, 97 and 99
Comments Date:	10011998
Comments:	(collectively, PRL6). DTSC finds that the documents are equivalen
Comments Date:	10011998
Comments:	t to a PEA document.
Comments Date:	10112001
Comments:	RAW - S426 -- RAP of Edwards Air Force Base operable unit 7, site
Comments Date:	10112001
Comments:	426, includes both the Engineering Evaluation/Cost Analysis and
Comments Date:	10112001
Comments:	Action Memorandum. The selected remedy for the chemical warfare
Comments Date:	10112001
Comments:	site is containment excavation.
Comments Date:	10152004
Comments:	This FS summarizes the backgrounds, plume characteristics, and re
Comments Date:	10152004
Comments:	medial action alternatives evaluated for sites recommended for re
Comments Date:	10152004
Comments:	medial action within Operable Unit 6 (OU-6). The report includes
Comments Date:	10152004
Comments:	preliminary cleanup goals, technical approach comparisons, and c
Comments Date:	10152004
Comments:	ost comparisons of applicable remedial alternatives. Sites in OU
Comments Date:	10152004
Comments:	-6 are not currently used for residential purposes, nor is such u
Comments Date:	10152004
Comments:	se anticipated; therefore, the FS focuses on industrial use consi
Comments Date:	10152004
Comments:	derations. The preferred alternative recommended for the Proposed
Comments Date:	10152004
Comments:	Plan is Source Control and Hydrologic Control with Groundwater M
Comments Date:	10152004
Comments:	onitoring.
Comments Date:	10172000
Comments:	RAW - S133 -- The proposed Interim Removal Action consists of the
Comments Date:	10172000
Comments:	extraction of groundwater contaminated with solvents, primarily
Comments Date:	10172000
Comments:	trichloroethlyene, and treatment by liquid phase granular activat
Comments Date:	10172000
Comments:	ed carbon. Treated effluent will be discharged to the Base's san
Comments Date:	10172000
Comments:	itary sewer system. A total of 43,200 gallons per day of groundw
Comments Date:	10172000
Comments:	ater will be extracted and treated.
Comments Date:	12042000
Comments:	RAW - STE25 -- Concurrance on the proposed interim removal action
Comments Date:	12042000
Comments:	to treat groundwater contaminated with telchloroethylene and N-N

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Comments Date:	12042000
Comments:	iprosodimethylamine. Extracted groundwater will be treated by ca
Comments Date:	12042000
Comments:	rbon absorption and discharged to EAFB's sanitary sewer.
Comments Date:	12132001
Comments:	PEA - PRL24 - Preliminary Endangerment Assessment (PEA) of Edward
Comments Date:	12132001
Comments:	s Air Force Base, Operable Unit 4, sites 7 and 174 and area of co
Comments Date:	12132001
Comments:	ncern 167, determined that these sites and of concern pose no env
Comments Date:	12132001
Comments:	ironmental or Human Health Threat. This document administratively
Comments Date:	12132001
Comments:	removes these sites from further investigation. PEA - PRL25 --
Comments Date:	12132001
Comments:	Preliminary Endangerment Assessment (PEA) Edwards Air Force Base
Comments Date:	12132001
Comments:	, Operable Unit 7, Sites 295, 434, 435, 436 441 and area of conce
Comments Date:	12132001
Comments:	rn 457, determined that these sites and area of concern pose no E
Comments Date:	12132001
Comments:	nvironmental or Human Health Threat. This document administrative
Comments Date:	12132001
Comments:	ly removes these sites from further investigation. PEA - PRL26
Comments Date:	12132001
Comments:	-- Preliminary Endangerment Assessment (PEA) Edwards Air Force Ba
Comments Date:	12132001
Comments:	se, Operable Unit 9, Site 179, determined that this site poses no
Comments Date:	12132001
Comments:	environmental or Human Health Threat. This document administrati
Comments Date:	12132001
Comments:	vely removes this site from further investigation.
Comments Date:	03292002
Comments:	er Investigation (NFI) documents signed by the Edwards Air Force
Comments Date:	03292002
Comments:	Base Remedial Project Manager for Operable Unit 4 - Air Force Res
Comments Date:	03292002
Comments:	earch Laboratory Site Number 7 and 146, and Area of Concern (AOC)
Comments Date:	03292002
Comments:	Number 167 and 174. The NFI determination for these site-specif
Comments Date:	03292002
Comments:	ic actions means that these Sites/AOCs have been adequately inves
Comments Date:	03292002
Comments:	tigated and that the results justify the determination.
Comments Date:	04212000
Comments:	PEA -- Concurrance provided on PEA equivalent documents for OU-3,
Comments Date:	04212000
Comments:	sites 30,412,413,414, and 415.
Comments Date:	04271999
Comments:	OM - OU-6 -- APPROVAL OF THE O&M PLAN FOR OU-6 SITES, N2, N3 AND
Comments Date:	04271999
Comments:	N7.
Comments Date:	05011986
Comments:	Records Search: Military air force base. Contaminants
Comments Date:	05011986
Comments:	include JP-4, benzene, toluene, xylene, TCE, & PCE.
Comments Date:	05071998

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Comments:	RAW - SIT9 -- The South Base abandoned landfill has been fenced a
Comments Date:	05071998
Comments:	nd will be monitored. RAW - SIT14 -- Groundwater at Site 14 con
Comments Date:	05071998
Comments:	taminated with petroleum hydrocarbon, volatile organics, and semi
Comments Date:	05071998
Comments:	-volatile organcis will be treated via extraction and treatment b
Comments Date:	05071998
Comments:	y liquid-phase granular activated carbon adsoption, then reinject
Comments Date:	05071998
Comments:	ed into the groundwater aquifer. RAW - S223 -- Petroleum hydroc
Comments Date:	05071998
Comments:	arbon contamination in soil and groundwater will be treated using
Comments Date:	05071998
Comments:	soil vapor extraction/vapor treatment for soils and air sparging
Comments Date:	05071998
Comments:	for groundwater. Monitoring of the system will also be required.
Comments Date:	05132003
Comments:	RA - STE25 -- This report summarizes the operational maintenance
Comments Date:	05132003
Comments:	and system sampling data collected during the period from Decembe
Comments Date:	05132003
Comments:	r 28, 2001 through July 1, 2002 for the Site 25 Groundwater Extra
Comments Date:	05132003
Comments:	ction and Treatment System (GETS), in Operable Unit No. 8. Durin
Comments Date:	05132003
Comments:	g the reporting period, approximately 4,483,000 gallons of ground
Comments Date:	05132003
Comments:	water were extracted and treated by the Site 25 GETS at an averag
Comments Date:	05132003
Comments:	e folwrate of 19.9 gallons per minute. 20.5 pounds (lbs.) of tri
Comments Date:	05132003
Comments:	chloroethene (TCE) were removed from treated groundwater. As of
Comments Date:	05132003
Comments:	July 1, 2002, the GETS removed a cumulative total of 28.7. lbs.
Comments Date:	05132003
Comments:	of TCE from treated groundwater. The treatment system effluent i
Comments Date:	05132003
Comments:	s discharged to the base sanitary sewer under an industrial waste
Comments Date:	05132003
Comments:	water discharge permit issued by Edwards Air Force Base (AFB).
Comments Date:	05311994
Comments:	PPP - DTSC approved a Public Participation Plan (revision) for Ed
Comments Date:	05311994
Comments:	wards Air Force Base.
Comments Date:	06011999
Comments:	RA - S223 -- Implementation of a SVE/Air sparging system to remed
Comments Date:	06011999
Comments:	iate fuel contaminated soil and groundwater.
Comments Date:	06041998
Comments:	RA - SIT29-- Removal action consisted of fencing the site for acc
Comments Date:	06041998
Comments:	ess restriction and conducting long - term groundwater monitoring
Comments Date:	06041998
Comments:	.
Comments Date:	06082001
Comments:	PEA - PRL19 -- concurrence provided on PEA equivalent document fo

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Comments Date:	06082001
Comments:	r OU4, Site 186.
Comments Date:	06111999
Comments:	RA - SIT14 -- Implementation of a GW extraction/treatment system
Comments Date:	06111999
Comments:	to remediate TCE contaminated GW. System implemented consists of
Comments Date:	06111999
Comments:	4 extraction wells and an above ground treatment system using ca
Comments Date:	06111999
Comments:	rbon adsorption.
Comments Date:	06112001
Comments:	PEA - PRL20 -- Concurrence provided on PEA equivalent documents f
Comments Date:	06112001
Comments:	or OU-5 sites 229, 235, 236, 238, 348, and 349 and AOCs 187, 190-
Comments Date:	06112001
Comments:	192, 230, 246, 251, 253, 281, 283, 287, 288, 403, 420 423.
Comments Date:	06272003
Comments:	RA - S133 -- Construction of the Groundwater Exttraction Treatmen
Comments Date:	06272003
Comments:	t System was completed between 01/09 and 04/18/2001 with testing
Comments Date:	06272003
Comments:	of the system during the week of 04/23/2001 and startup on 04/30/
Comments Date:	06272003
Comments:	2001. The system includes three groundwater extraction wells and
Comments Date:	06272003
Comments:	an aboveground treatment system that uses liquid-phase granular
Comments Date:	06272003
Comments:	activated carbon to remove volatile organic compounds (VOCs) in t
Comments Date:	06272003
Comments:	he extracted groundwater prior to discharge to the Air Force Rese
Comments Date:	06272003
Comments:	arch Laboratory (AFRL) sewage treatment plant. The system is des
Comments Date:	06272003
Comments:	igned for a maximum capacity of 50 gallons per minute (gpm); howe
Comments Date:	06272003
Comments:	ver, the volume of water extracted is limited by a discharge perm
Comments Date:	06272003
Comments:	it to 20 gpm.
Comments Date:	06282002
Comments:	PEA - PRL30 -- No Further Investigation (NFI) documents signed by
Comments Date:	06282002
Comments:	the Edwards Air Force Base Remedial Project Managers for Operabl
Comments Date:	06282002
Comments:	e Unit 7 - Basewide Miscellaneous Area of Concern (AOC) Number 40
Comments Date:	06282002
Comments:	0. The NFI determination for this site-specific action means tha
Comments Date:	06282002
Comments:	t the AOC has been adequately investigated and that the results j
Comments Date:	06282002
Comments:	ustify the determination. PEA - PRL31 -- No Futher Investigatio
Comments Date:	06282002
Comments:	n (NFI) documents signed by the Edwards Air Force Base Remedial P
Comments Date:	06282002
Comments:	roject Managers for Operable Unit 1 - Main Base Flight Line Site
Comments Date:	06282002
Comments:	Number 65. The NFI determination for this site-specific action m
Comments Date:	06282002

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Comments: eans that the Site has been adequately investigated and that the
Comments Date: 06282002
Comments: results justify the determination. PEA - PRL32 -- No Further In
Comments Date: 06282002
Comments: vestigation (NFI) documents signed by the Edwards Air Force Base
Comments Date: 06282002
Comments: Remedial Project Managers for Operable Unit 2 - Ould South Base S
Comments Date: 06282002
Comments: ite Number 96. The NFI determination for this site-specific acti
Comments Date: 06282002
Comments: on means that this Site has been adequately investigated and that
Comments Date: 06282002
Comments: the results justify the determination.
Comments Date: 06302003
Comments: OM - S172 -- In January 2000, the Air Force implemented an interi
Comments Date: 06302003
Comments: m removal action (IRA) consisting of soil vapor extraction (SVE)
Comments Date: 06302003
Comments: at Site 172, the outdoor waste sump at Building 8595 in Operable
Comments Date: 06302003
Comments: Uit 4, Air Force Research Laboratory. The primary objective of th
Comments Date: 06302003
Comments: e IRA at Site 172 is to remove contaminant mass and reduce the fu
Comments Date: 06302003
Comments: rther migration of volatile organic compounds (VOCs) from contami
Comments Date: 06302003
Comments: nated soil into the Site 37 groundwater plume. The SVE system op
Comments Date: 06302003
Comments: erated with one well initially; two more wells were added in Augu
Comments Date: 06302003
Comments: st 2000. Four additional extraction wells were connected to the s
Comments Date: 06302003
Comments: ystem, which was brought on line September 12, 2002, extracting v
ID Name: EPA IDENTIFICATION NUMBER
ID Value: CA1570024504
ID Name: BEP DATABASE PCODE
ID Value: P12020
Alternate Name: EDWARDS AFB
Alternate Name: EDWARDS AIR FORCE BASE
Alternate Name: Not reported
Special Programs Code: DSMOA
Special Programs Name: DEFENSE MEMORANDUM OF AGREEMENT

DEED:
Name: EDWARDS AIR FORCE BASE - IR/MMRP
Address: 470 SQ MI; 60 MI NE OF LOS ANGELES, CA
City,State,Zip: EDWARDS, CA 93523
Envirostor ID: 15970001
Area: 4A - AFRL AREA
Sub Area: Not reported
Site Type: FEDERAL SUPERFUND
Status: ACTIVE
Agency: Not reported
Covenant Uploaded: Not reported
Deed Date(s): Not reported
File Name: Envirostor Land Use Restrictions

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Name: EDWARDS AIR FORCE BASE - IR/MMRP
Address: 470 SQ MI; 60 MI NE OF LOS ANGELES, CA
City,State,Zip: EDWARDS, CA 93523
Envirostor ID: 15970001
Area: 6 - OPERABLE UNIT 6, NASA DRYDEN
Sub Area: Not reported
Site Type: FEDERAL SUPERFUND
Status: ACTIVE
Agency: Not reported
Covenant Uploaded: Not reported
Deed Date(s): Not reported
File Name: Envirostor Land Use Restrictions

ROD:
Name: EDWARDS AIR FORCE BASE
Address: AFFTC EDWARDS AFB 5 EAST POPSON AVE, BLDG 2650A
City,State,Zip: EDWARDS AFB, CA 93524
EPA ID: CA1570024504
RG: 9
Site ID: 902725
Action: FF ESD
Operable Unit Number: AFRL SOIL & DEBRIS (OU 4&9)
SEQ ID: 1
Action Completion: 2013-06-28 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: EDWARDS AIR FORCE BASE
Address: AFFTC EDWARDS AFB 5 EAST POPSON AVE, BLDG 2650A
City,State,Zip: EDWARDS AFB, CA 93524
EPA ID: CA1570024504
RG: 9
Site ID: 902725
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: SOUTH BASE
SEQ ID: 1
Action Completion: 2009-06-24 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: EDWARDS AIR FORCE BASE
Address: AFFTC EDWARDS AFB 5 EAST POPSON AVE, BLDG 2650A
City,State,Zip: EDWARDS AFB, CA 93524
EPA ID: CA1570024504
RG: 9
Site ID: 902725
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: BASEWIDE WELLS (HOMESTEAD)
SEQ ID: 2
Action Completion: 2003-09-30 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: EDWARDS AIR FORCE BASE
Address: AFFTC EDWARDS AFB 5 EAST POPSON AVE, BLDG 2650A
City,State,Zip: EDWARDS AFB, CA 93524
EPA ID: CA1570024504

EDWARDS AIR FORCE BASE (Continued) **1000155217**

RG: 9
Site ID: 902725
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: SOUTH AFRL GROUNDWATER
SEQ ID: 3
Action Completion: 2007-09-24 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: EDWARDS AIR FORCE BASE
Address: AFFTC EDWARDS AFB 5 EAST POPSON AVE, BLDG 2650A
City,State,Zip: EDWARDS AFB, CA 93524
EPA ID: CA1570024504
RG: 9
Site ID: 902725
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: NASA DRYDEN / ARMSTRONG
SEQ ID: 4
Action Completion: 2006-09-28 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: EDWARDS AIR FORCE BASE
Address: AFFTC EDWARDS AFB 5 EAST POPSON AVE, BLDG 2650A
City,State,Zip: EDWARDS AFB, CA 93524
EPA ID: CA1570024504
RG: 9
Site ID: 902725
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: CHEMICAL WEAPONS MATERIEL
SEQ ID: 5
Action Completion: 2009-09-16 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: EDWARDS AIR FORCE BASE
Address: AFFTC EDWARDS AFB 5 EAST POPSON AVE, BLDG 2650A
City,State,Zip: EDWARDS AFB, CA 93524
EPA ID: CA1570024504
RG: 9
Site ID: 902725
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: AFRL SOIL & DEBRIS (OU 4&9)
SEQ ID: 12
Action Completion: 2008-08-04 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: EDWARDS AIR FORCE BASE
Address: AFFTC EDWARDS AFB 5 EAST POPSON AVE, BLDG 2650A
City,State,Zip: EDWARDS AFB, CA 93524
EPA ID: CA1570024504
RG: 9
Site ID: 902725
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: SITE 3 LANDFILL
SEQ ID: 15

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Action Completion: 2012-09-21 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: EDWARDS AIR FORCE BASE
Address: AFFTC EDWARDS AFB 5 EAST POPSON AVE, BLDG 2650A
City,State,Zip: EDWARDS AFB, CA 93524
EPA ID: CA1570024504
RG: 9
Site ID: 902725
Action: FF ROD Amendment
Operable Unit Number: SOUTH BASE
SEQ ID: 1
Action Completion: 2012-09-27 00:00:00
NPL Status: Final
Non NPL Status: Not reported

RAATS:

Entry No: 1
Facility ID: CA1570024504
Type: Not reported
Docket No: RCRA 09-89-0003
Region: 09
Issue Date: 06/09/1989
Final Date: 02/09/1989
Status: Federal Facility Compliance Agreement
Additional: Not reported
Action ID: 461
Action: Notice of Non-Compliance
Violation No: Not reported
Viol No Cited: 1 265.13(A)(3)
Total No Cited: Not reported
Reg Type: CFR
Prop. Penalty: .00
Final Penalty: .00
Total Prop. Penalty: .00
Comments: FEDERAL FACILITY COMPLIANCE AGREEMENT SIGNED 6/9/89.

Entry No: 1
Facility ID: CA1570024504
Type: Not reported
Docket No: RCRA 09-89-0003
Region: 09
Issue Date: 06/09/1989
Final Date: 02/09/1989
Status: Federal Facility Compliance Agreement
Additional: Not reported
Action ID: 461
Action: Notice of Non-Compliance
Violation No: Not reported
Viol No Cited: 5 265.15(B)(2)
Total No Cited: Not reported
Reg Type: CFR
Prop. Penalty: *
Final Penalty: .00
Total Prop. Penalty: .00
Comments: FEDERAL FACILITY COMPLIANCE AGREEMENT SIGNED 6/9/89.

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Entry No:	1
Facility ID:	CA1570024504
Type:	Not reported
Docket No:	RCRA 09-89-0003
Region:	09
Issue Date:	06/09/1989
Final Date:	02/09/1989
Status:	Federal Facility Compliance Agreement
Additional:	Not reported
Action ID:	461
Action:	Notice of Non-Compliance
Violation No:	Not reported
Viol No Cited:	6 265.16(A)(3)(V)
Total No Cited:	Not reported
Reg Type:	CFR
Prop. Penalty:	*
Final Penalty:	.00
Total Prop. Penalty:	.00
Comments:	FEDERAL FACILITY COMPLIANCE AGREEMENT SIGNED 6/9/89.

Entry No:	1
Facility ID:	CA1570024504
Type:	Not reported
Docket No:	RCRA 09-89-0003
Region:	09
Issue Date:	06/09/1989
Final Date:	02/09/1989
Status:	Federal Facility Compliance Agreement
Additional:	Not reported
Action ID:	461
Action:	Notice of Non-Compliance
Violation No:	Not reported
Viol No Cited:	7 265.16(D)
Total No Cited:	Not reported
Reg Type:	CFR
Prop. Penalty:	*
Final Penalty:	.00
Total Prop. Penalty:	.00
Comments:	FEDERAL FACILITY COMPLIANCE AGREEMENT SIGNED 6/9/89.

Entry No:	1
Facility ID:	CA1570024504
Type:	Not reported
Docket No:	RCRA 09-89-0003
Region:	09
Issue Date:	06/09/1989
Final Date:	02/09/1989
Status:	Federal Facility Compliance Agreement
Additional:	Not reported
Action ID:	461
Action:	Notice of Non-Compliance
Violation No:	Not reported
Viol No Cited:	8 265.16(E)
Total No Cited:	Not reported
Reg Type:	CFR
Prop. Penalty:	*
Final Penalty:	.00

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Total Prop. Penalty: .00
Comments: FEDERAL FACILITY COMPLIANCE AGREEMENT SIGNED 6/9/89.

Entry No: 1
Facility ID: CA1570024504
Type: Not reported
Docket No: RCRA 09-89-0003
Region: 09
Issue Date: 06/09/1989
Final Date: 02/09/1989
Status: Federal Facility Compliance Agreement
Additional: Not reported
Action ID: 461
Action: Notice of Non-Compliance
Violation No: Not reported
Viol No Cited: 9 265.32(A)
Total No Cited: Not reported
Reg Type: CFR
Prop. Penalty: *
Final Penalty: .00
Total Prop. Penalty: .00
Comments: FEDERAL FACILITY COMPLIANCE AGREEMENT SIGNED 6/9/89.

Entry No: 1
Facility ID: CA1570024504
Type: Not reported
Docket No: RCRA 09-89-0003
Region: 09
Issue Date: 06/09/1989
Final Date: 02/09/1989
Status: Federal Facility Compliance Agreement
Additional: Not reported
Action ID: 461
Action: Notice of Non-Compliance
Violation No: Not reported
Viol No Cited: 10 265.32(B)
Total No Cited: Not reported
Reg Type: CFR
Prop. Penalty: *
Final Penalty: .00
Total Prop. Penalty: .00
Comments: FEDERAL FACILITY COMPLIANCE AGREEMENT SIGNED 6/9/89.

Entry No: 1
Facility ID: CA1570024504
Type: Not reported
Docket No: RCRA 09-89-0003
Region: 09
Issue Date: 06/09/1989
Final Date: 02/09/1989
Status: Federal Facility Compliance Agreement
Additional: Not reported
Action ID: 461
Action: Notice of Non-Compliance
Violation No: Not reported
Viol No Cited: 11 265.32(D)
Total No Cited: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Reg Type: CFR
Prop. Penalty: *
Final Penalty: .00
Total Prop. Penalty: .00
Comments: FEDERAL FACILITY COMPLIANCE AGREEMENT SIGNED 6/9/89.

Entry No: 1
Facility ID: CA1570024504
Type: Not reported
Docket No: RCRA 09-89-0003
Region: 09
Issue Date: 06/09/1989
Final Date: 02/09/1989
Status: Federal Facility Compliance Agreement
Additional: Not reported
Action ID: 461
Action: Notice of Non-Compliance
Violation No: Not reported
Viol No Cited: 12 265.33
Total No Cited: Not reported
Reg Type: CFR
Prop. Penalty: *
Final Penalty: .00
Total Prop. Penalty: .00
Comments: FEDERAL FACILITY COMPLIANCE AGREEMENT SIGNED 6/9/89.

Entry No: 1
Facility ID: CA1570024504
Type: Not reported
Docket No: RCRA 09-89-0003
Region: 09
Issue Date: 06/09/1989
Final Date: 02/09/1989
Status: Federal Facility Compliance Agreement
Additional: Not reported
Action ID: 461
Action: Notice of Non-Compliance
Violation No: Not reported
Viol No Cited: 13 265.34(A)
Total No Cited: Not reported
Reg Type: CFR
Prop. Penalty: *
Final Penalty: .00
Total Prop. Penalty: .00
Comments: FEDERAL FACILITY COMPLIANCE AGREEMENT SIGNED 6/9/89.

Entry No: 1
Facility ID: CA1570024504
Type: Not reported
Docket No: RCRA 09-89-0003
Region: 09
Issue Date: 06/09/1989
Final Date: 02/09/1989
Status: Federal Facility Compliance Agreement
Additional: Not reported
Action ID: 461
Action: Notice of Non-Compliance

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Violation No: Not reported
Viol No Cited: 14 265.35
Total No Cited: Not reported
Reg Type: CFR
Prop. Penalty: *
Final Penalty: .00
Total Prop. Penalty: .00
Comments: FEDERAL FACILITY COMPLIANCE AGREEMENT SIGNED 6/9/89.

Entry No: 1
Facility ID: CA1570024504
Type: Not reported
Docket No: RCRA 09-89-0003
Region: 09
Issue Date: 06/09/1989
Final Date: 02/09/1989
Status: Federal Facility Compliance Agreement
Additional: Not reported
Action ID: 461
Action: Notice of Non-Compliance
Violation No: Not reported
Viol No Cited: 15 265.51(A)
Total No Cited: Not reported
Reg Type: CFR
Prop. Penalty: *
Final Penalty: .00
Total Prop. Penalty: .00
Comments: FEDERAL FACILITY COMPLIANCE AGREEMENT SIGNED 6/9/89.

Entry No: 1
Facility ID: CA1570024504
Type: Not reported
Docket No: RCRA 09-89-0003
Region: 09
Issue Date: 06/09/1989
Final Date: 02/09/1989
Status: Federal Facility Compliance Agreement
Additional: Not reported
Action ID: 461
Action: Notice of Non-Compliance
Violation No: Not reported
Viol No Cited: 16 265.73(B)(2)
Total No Cited: Not reported
Reg Type: CFR
Prop. Penalty: *
Final Penalty: .00
Total Prop. Penalty: .00
Comments: FEDERAL FACILITY COMPLIANCE AGREEMENT SIGNED 6/9/89.

Entry No: 1
Facility ID: CA1570024504
Type: Not reported
Docket No: RCRA 09-89-0003
Region: 09
Issue Date: 06/09/1989
Final Date: 02/09/1989
Status: Federal Facility Compliance Agreement

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Additional: Not reported
Action ID: 461
Action: Notice of Non-Compliance
Violation No: Not reported
Viol No Cited: 17 265.73(B)(3)
Total No Cited: Not reported
Reg Type: CFR
Prop. Penalty: *
Final Penalty: .00
Total Prop. Penalty: .00
Comments: FEDERAL FACILITY COMPLIANCE AGREEMENT SIGNED 6/9/89.

Entry No: 1
Facility ID: CA1570024504
Type: Not reported
Docket No: RCRA 09-89-0003
Region: 09
Issue Date: 06/09/1989
Final Date: 02/09/1989
Status: Federal Facility Compliance Agreement
Additional: Not reported
Action ID: 461
Action: Notice of Non-Compliance
Violation No: Not reported
Viol No Cited: 18 265.72(B)(6)
Total No Cited: Not reported
Reg Type: CFR
Prop. Penalty: *
Final Penalty: .00
Total Prop. Penalty: .00
Comments: FEDERAL FACILITY COMPLIANCE AGREEMENT SIGNED 6/9/89.

Entry No: 1
Facility ID: CA1570024504
Type: Not reported
Docket No: RCRA 09-89-0003
Region: 09
Issue Date: 06/09/1989
Final Date: 02/09/1989
Status: Federal Facility Compliance Agreement
Additional: Not reported
Action ID: 461
Action: Notice of Non-Compliance
Violation No: Not reported
Viol No Cited: 19 265.75
Total No Cited: Not reported
Reg Type: CFR
Prop. Penalty: *
Final Penalty: .00
Total Prop. Penalty: .00
Comments: FEDERAL FACILITY COMPLIANCE AGREEMENT SIGNED 6/9/89.

Entry No: 1
Facility ID: CA1570024504
Type: Not reported
Docket No: RCRA 09-89-0003
Region: 09

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Issue Date: 06/09/1989
Final Date: 02/09/1989
Status: Federal Facility Compliance Agreement
Additional: Not reported
Action ID: 461
Action: Notice of Non-Compliance
Violation No: Not reported
Viol No Cited: 20 265.112(B)
Total No Cited: Not reported
Reg Type: CFR
Prop. Penalty: *
Final Penalty: .00
Total Prop. Penalty: .00
Comments: FEDERAL FACILITY COMPLIANCE AGREEMENT SIGNED 6/9/89.

Entry No: 1
Facility ID: CA1570024504
Type: Not reported
Docket No: RCRA 09-89-0003
Region: 09
Issue Date: 06/09/1989
Final Date: 02/09/1989
Status: Federal Facility Compliance Agreement
Additional: Not reported
Action ID: 461
Action: Notice of Non-Compliance
Violation No: Not reported
Viol No Cited: 21 265.118(A)
Total No Cited: Not reported
Reg Type: CFR
Prop. Penalty: *
Final Penalty: .00
Total Prop. Penalty: .00
Comments: FEDERAL FACILITY COMPLIANCE AGREEMENT SIGNED 6/9/89.

Entry No: 1
Facility ID: CA1570024504
Type: Not reported
Docket No: RCRA 09-89-0003
Region: 09
Issue Date: 06/09/1989
Final Date: 02/09/1989
Status: Federal Facility Compliance Agreement
Additional: Not reported
Action ID: 461
Action: Notice of Non-Compliance
Violation No: Not reported
Viol No Cited: 22 265.173
Total No Cited: Not reported
Reg Type: CFR
Prop. Penalty: *
Final Penalty: .00
Total Prop. Penalty: .00
Comments: FEDERAL FACILITY COMPLIANCE AGREEMENT SIGNED 6/9/89.

Entry No: 1
Facility ID: CA1570024504

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Type:	Not reported
Docket No:	RCRA 09-89-0003
Region:	09
Issue Date:	06/09/1989
Final Date:	02/09/1989
Status:	Federal Facility Compliance Agreement
Additional:	Not reported
Action ID:	461
Action:	Notice of Non-Compliance
Violation No:	Not reported
Viol No Cited:	23 265.173(B)
Total No Cited:	Not reported
Reg Type:	CFR
Prop. Penalty:	*
Final Penalty:	.00
Total Prop. Penalty:	.00
Comments:	FEDERAL FACILITY COMPLIANCE AGREEMENT SIGNED 6/9/89.

Entry No:	1
Facility ID:	CA1570024504
Type:	Not reported
Docket No:	RCRA 09-89-0003
Region:	09
Issue Date:	06/09/1989
Final Date:	02/09/1989
Status:	Federal Facility Compliance Agreement
Additional:	Not reported
Action ID:	461
Action:	Notice of Non-Compliance
Violation No:	Not reported
Viol No Cited:	24 268.7
Total No Cited:	Not reported
Reg Type:	CFR
Prop. Penalty:	*
Final Penalty:	.00
Total Prop. Penalty:	.00
Comments:	FEDERAL FACILITY COMPLIANCE AGREEMENT SIGNED 6/9/89.

Entry No:	1
Facility ID:	CA1570024504
Type:	Not reported
Docket No:	RCRA 09-89-0003
Region:	09
Issue Date:	06/09/1989
Final Date:	02/09/1989
Status:	Federal Facility Compliance Agreement
Additional:	Not reported
Action ID:	461
Action:	Notice of Non-Compliance
Violation No:	Not reported
Viol No Cited:	25 262.34(A)(2)
Total No Cited:	Not reported
Reg Type:	CFR
Prop. Penalty:	*
Final Penalty:	.00
Total Prop. Penalty:	.00
Comments:	FEDERAL FACILITY COMPLIANCE AGREEMENT SIGNED 6/9/89.

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Entry No:	1
Facility ID:	CA1570024504
Type:	Not reported
Docket No:	RCRA 09-89-0003
Region:	09
Issue Date:	06/09/1989
Final Date:	02/09/1989
Status:	Federal Facility Compliance Agreement
Additional:	Not reported
Action ID:	461
Action:	Notice of Non-Compliance
Violation No:	Not reported
Viol No Cited:	2 265.13(B)(4)
Total No Cited:	Not reported
Reg Type:	CFR
Prop. Penalty:	*
Final Penalty:	.00
Total Prop. Penalty:	.00
Comments:	FEDERAL FACILITY COMPLIANCE AGREEMENT SIGNED 6/9/89.

Entry No:	1
Facility ID:	CA1570024504
Type:	Not reported
Docket No:	RCRA 09-89-0003
Region:	09
Issue Date:	06/09/1989
Final Date:	02/09/1989
Status:	Federal Facility Compliance Agreement
Additional:	Not reported
Action ID:	461
Action:	Notice of Non-Compliance
Violation No:	Not reported
Viol No Cited:	3 265.14(C)
Total No Cited:	Not reported
Reg Type:	CFR
Prop. Penalty:	*
Final Penalty:	.00
Total Prop. Penalty:	.00
Comments:	FEDERAL FACILITY COMPLIANCE AGREEMENT SIGNED 6/9/89.

Entry No:	1
Facility ID:	CA1570024504
Type:	Not reported
Docket No:	RCRA 09-89-0003
Region:	09
Issue Date:	06/09/1989
Final Date:	02/09/1989
Status:	Federal Facility Compliance Agreement
Additional:	Not reported
Action ID:	461
Action:	Notice of Non-Compliance
Violation No:	Not reported
Viol No Cited:	4 265.15(B)(1)
Total No Cited:	Not reported
Reg Type:	CFR
Prop. Penalty:	*
Final Penalty:	.00

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Total Prop. Penalty: .00
Comments: FEDERAL FACILITY COMPLIANCE AGREEMENT SIGNED 6/9/89.

PRP:
PRP Name: STATE OF CALIFORNIA/DEPT. OF HEALTH SERVICES
STATE OF CALIFORNIA/DEPT. OF HEALTH SERVICES
STATE OF CALIFORNIA/DEPT. OF WATER QUALITY
STATE OF CALIFORNIA/DEPT. OF WATER QUALITY
U.S. AIR FORCE
U.S. AIR FORCE
U.S. EPA

ICIS:
Enforcement Action ID: CAKCAA200135770
FRS ID: 110000908466
Action Name: MSO for NOV# 101515
Facility Name: USAF - FTC EDWARDS
Facility Address: ALL FACILITIES (BEGIN)
EDWARDS, CA 93523
Enforcement Action Type: Administrative Order
Facility County: KERN
Program System Acronym: AIR
Enforcement Action Forum Desc: Administrative - Formal
EA Type Code: SCAAAO
Facility SIC Code: 9661
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 34.94943
Longitude in Decimal Degrees: -117.8857
Permit Type Desc: Not reported
Program System Acronym: CAKCA0000602900531
Facility NAICS Code: 927110
Tribal Land Code: Not reported

Enforcement Action ID: CAKCAA200135768
FRS ID: 110000908466
Action Name: NOV# 101515
Facility Name: USAF - FTC EDWARDS
Facility Address: ALL FACILITIES (BEGIN)
EDWARDS, CA 93523
Enforcement Action Type: Notice of Violation
Facility County: KERN
Program System Acronym: AIR
Enforcement Action Forum Desc: Administrative - Informal
EA Type Code: NOV
Facility SIC Code: 9661
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 34.94943
Longitude in Decimal Degrees: -117.8857
Permit Type Desc: Not reported
Program System Acronym: CAKCA0000602900531
Facility NAICS Code: 927110
Tribal Land Code: Not reported

Enforcement Action ID: CAKCAA0000060290053100035
FRS ID: 110000908466
Action Name: USAF - FTC EDWARDS 060290053100035

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Facility Name:	USAF - FTC EDWARDS
Facility Address:	ALL FACILITIES (BEGIN) EDWARDS, CA 93523
Enforcement Action Type:	Notice of Violation
Facility County:	KERN
Program System Acronym:	AIR
Enforcement Action Forum Desc:	Administrative - Informal
EA Type Code:	NOV
Facility SIC Code:	9661
Federal Facility ID:	Not reported
Latitude in Decimal Degrees:	34.94943
Longitude in Decimal Degrees:	-117.8857
Permit Type Desc:	Not reported
Program System Acronym:	CAKCA0000602900531
Facility NAICS Code:	927110
Tribal Land Code:	Not reported

US AIRS (AFS):

Envid:	1000155217
Region Code:	09
County Code:	CA029
Programmatic ID:	AIR CAKCA0000602900531
Facility Registry ID:	110000908466
D and B Number:	Not reported
Facility Site Name:	USAF - FTC EDWARDS
Primary SIC Code:	9661
NAICS Code:	927110
Default Air Classification Code:	MAJ
Facility Type of Ownership Code:	FDF
Air CMS Category Code:	TVM
HPV Status:	Not reported

US AIRS (AFS):

Region Code:	09
Programmatic ID:	AIR CAKCA0000602900531
Facility Registry ID:	110000908466
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	MACT Standards (40 CFR Part 63)
Activity Date:	2008-08-21 00:00:00
Activity Status Date:	2008-09-23 17:19:32
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Active

Region Code:	09
Programmatic ID:	AIR CAKCA0000602900531
Facility Registry ID:	110000908466
Air Operating Status Code:	OPR
Default Air Classification Code:	MAJ
Air Program:	MACT Standards (40 CFR Part 63)
Activity Date:	2015-05-21 00:00:00
Activity Status Date:	2016-05-12 18:59:04
Activity Group:	Compliance Monitoring
Activity Type:	Inspection/Evaluation
Activity Status:	Active

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2015-05-21 00:00:00
Activity Status Date: 2016-05-12 19:00:43
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2015-05-21 00:00:00
Activity Status Date: 2016-05-12 19:02:28
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2004-06-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2004-08-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2005-04-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2005-12-02 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2006-04-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2006-10-12 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2007-04-25 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: MACT Standards (40 CFR Part 63)

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Activity Date: 2007-10-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2008-04-23 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2008-11-18 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2009-05-31 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2015-05-21 00:00:00
Activity Status Date: 2016-05-12 18:59:04
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2015-05-21 00:00:00
Activity Status Date: 2016-05-12 19:00:43
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2015-05-21 00:00:00
Activity Status Date: 2016-05-12 19:02:28
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 1987-06-08 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 1988-06-16 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 1988-06-22 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 1989-07-03 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 1990-09-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 1993-07-10 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 1993-08-31 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 1994-08-09 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 1995-06-28 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 1996-05-16 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 1996-10-15 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 1997-10-17 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Activity Date: 1998-05-06 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 1999-03-03 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 1999-03-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 1999-03-09 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 1999-04-15 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2000-08-03 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2000-10-18 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2000-10-19 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2000-10-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2002-02-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2004-06-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2004-08-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2005-04-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2005-12-02 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2006-04-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2006-10-12 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2007-04-25 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2007-10-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2008-04-23 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Activity Date: 2008-08-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2008-11-18 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
Activity Date: 2009-05-31 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2015-10-02 00:00:00
Activity Status Date: 2016-04-14 19:06:28
Activity Group: Case File
Activity Type: Case File
Activity Status: Resolved

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2015-05-21 00:00:00
Activity Status Date: 2016-05-12 18:59:04
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2015-05-21 00:00:00
Activity Status Date: 2016-05-12 19:00:43
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2015-05-21 00:00:00
Activity Status Date: 2016-05-12 19:02:28
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 1988-05-25 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 1990-09-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 1991-11-18 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 1993-08-31 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 1994-08-09 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 1995-06-28 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 1996-05-16 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 1996-10-15 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 1997-10-17 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 1998-05-06 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 1999-03-03 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 1999-03-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Activity Date: 1999-03-09 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 1999-04-15 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2000-08-03 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2000-10-18 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2000-10-19 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2000-10-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2002-02-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2004-06-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2004-08-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2005-04-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2005-12-02 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2006-04-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2006-10-12 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2007-04-25 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2007-10-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2008-04-23 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2008-11-18 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2009-05-31 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Performance Standards
Activity Date: 2016-06-02 00:00:00
Activity Status Date: 2016-06-02 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Formal
Activity Status: Resolved

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Review Permit Requirements

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Activity Date: 2015-05-21 00:00:00
Activity Status Date: 2016-05-12 18:59:04
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Review Permit Requirements
Activity Date: 2015-05-21 00:00:00
Activity Status Date: 2016-05-12 19:00:43
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Review Permit Requirements
Activity Date: 2015-05-21 00:00:00
Activity Status Date: 2016-05-12 19:02:28
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Review Permit Requirements
Activity Date: 2004-06-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Review Permit Requirements
Activity Date: 2004-08-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Review Permit Requirements
Activity Date: 2005-04-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Review Permit Requirements
Activity Date: 2005-12-02 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Review Permit Requirements
Activity Date: 2006-04-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Review Permit Requirements
Activity Date: 2006-10-12 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Review Permit Requirements
Activity Date: 2007-04-25 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Review Permit Requirements
Activity Date: 2007-10-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Review Permit Requirements
Activity Date: 2008-04-23 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Review Permit Requirements
Activity Date: 2008-11-18 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Review Permit Requirements
Activity Date: 2009-05-31 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: New Source Review Permit Requirements
Activity Date: Not reported
Activity Status Date: 2015-10-15 00:00:00
Activity Group: Enforcement Action

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Activity Type: Administrative - Informal
Activity Status: Achieved

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: Not reported
Activity Status Date: 1995-12-14 00:00:00
Activity Group: Case File
Activity Type: Case File
Activity Status: Resolved

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2014-06-06 00:00:00
Activity Status Date: 2015-06-09 13:46:14
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2015-05-21 00:00:00
Activity Status Date: 2016-05-12 18:59:04
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2015-05-21 00:00:00
Activity Status Date: 2016-05-12 19:00:43
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Activity Date: 2015-05-21 00:00:00
Activity Status Date: 2016-05-12 19:02:28
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2015-06-23 00:00:00
Activity Status Date: 2015-09-02 13:17:42
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1976-02-10 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1978-08-31 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1979-07-16 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1979-08-17 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1980-06-13 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1981-07-23 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1982-01-10 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1982-07-01 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1983-06-13 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1984-08-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1985-08-14 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1986-05-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1987-06-08 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1988-06-16 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1989-07-03 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1989-09-09 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1990-09-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Activity Date: 1991-11-18 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1993-08-31 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1994-08-09 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1995-06-28 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1996-05-16 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1996-10-15 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1997-10-17 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1998-05-06 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1999-03-03 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1999-03-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1999-03-09 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1999-04-15 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2000-08-03 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2000-10-18 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2000-10-19 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2000-10-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2002-02-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2004-06-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2004-08-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Activity Date: 2005-04-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2005-12-02 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2006-04-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2006-10-12 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2007-04-25 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2007-10-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2008-04-23 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2008-11-18 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2009-05-31 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2009-12-10 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2010-05-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2010-05-26 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2010-05-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2010-10-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2011-03-22 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2011-06-22 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2011-06-23 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2011-09-15 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2012-03-18 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Activity Date: 2012-06-18 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2012-07-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2012-09-28 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2012-10-06 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-03-08 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-06-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-06-26 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-06-28 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-10-06 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2014-02-12 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2014-02-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2014-05-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2014-05-29 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2014-06-06 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2014-06-26 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2014-06-29 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 1995-08-09 00:00:00
Activity Status Date: 1995-08-09 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Informal
Activity Status: Achieved

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2015-10-02 00:00:00
Activity Status Date: 2016-04-14 19:06:28
Activity Group: Case File
Activity Type: Case File
Activity Status: Resolved

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2014-06-06 00:00:00
Activity Status Date: 2015-06-09 13:46:14
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Activity Date: 2015-02-19 00:00:00
Activity Status Date: 2015-07-03 15:48:16
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2015-02-19 00:00:00
Activity Status Date: 2016-07-25 18:30:49
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2015-05-21 00:00:00
Activity Status Date: 2016-05-12 18:59:04
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2015-05-21 00:00:00
Activity Status Date: 2016-05-12 19:00:43
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2015-05-21 00:00:00
Activity Status Date: 2016-05-12 19:02:28
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2015-06-23 00:00:00
Activity Status Date: 2015-09-02 13:17:42
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Active

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 1997-10-17 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 1998-05-06 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 1999-03-03 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 1999-03-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 1999-03-09 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 1999-04-15 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2000-08-03 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2000-10-18 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2000-10-19 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2000-10-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2000-12-28 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2001-11-28 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2002-02-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Activity Date: 2002-05-29 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2002-06-09 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2002-07-17 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2002-09-16 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2003-01-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2003-02-19 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2003-02-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2003-03-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2003-04-08 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2003-04-10 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2003-05-29 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2003-06-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2003-06-06 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2003-07-28 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2003-12-18 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2004-05-02 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2004-05-29 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2004-06-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2004-08-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Activity Date: 2005-04-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2005-05-29 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2005-12-02 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2006-04-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2006-10-12 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2007-04-25 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2007-10-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2008-04-23 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2008-11-18 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2009-05-31 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2009-12-10 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2010-05-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2010-05-26 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2010-05-27 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2010-10-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2011-03-22 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2011-06-22 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2011-06-23 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2011-09-15 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Activity Date: 2012-03-18 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2012-06-18 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2012-07-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2012-09-28 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2012-10-06 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2013-03-08 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2013-06-24 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2013-06-26 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2013-06-28 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2013-10-06 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2014-02-12 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2014-02-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2014-05-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2014-05-29 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2014-06-06 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2014-06-26 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2014-06-29 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: 2016-06-02 00:00:00
Activity Status Date: 2016-06-02 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Formal
Activity Status: Resolved

Region Code: 09
Programmatic ID: AIR CAKCA0000602900531
Facility Registry ID: 110000908466
Air Operating Status Code: OPR
Default Air Classification Code: MAJ
Air Program: Title V Permits
Activity Date: Not reported
Activity Status Date: 2015-10-15 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Informal
Activity Status: Achieved

DOCKET HWC:
Agency: AIR FORCE
Facility ID: CA1570024504
Reporting Mechanism: RCRA 3005
Status: On MDL

EDWARDS AIR FORCE BASE (Continued) **1000155217**

ICE:
Envirostor ID: 3000601
Name: EDWARDS AIR FORCE BASE
Address: 5 E POPSON AVE
City,State,Zip: EDWARDS, CA 93524
EPA ID: CA1570024504
Site Type: INSPECTION
Facility Status: No Action

Inspection:
Action Type: Compliance Evaluation Inspection - Treatment, Storage and Disposal
Action Date: 11/20/2002
Violation Class: No Violations
RTC Date: Not reported

Action Type: Compliance Evaluation Inspection - Treatment, Storage and Disposal
Action Date: 06/13/2001
Violation Class: No Violations
RTC Date: Not reported

Action Type: Compliance Evaluation Inspection - Treatment, Storage and Disposal
Action Date: 12/12/2005
Violation Class: No Violations
RTC Date: Not reported

Action Type: Compliance Evaluation Inspection - Treatment, Storage and Disposal
Action Date: 11/06/2001
Violation Class: No Violations
RTC Date: Not reported

Action Type: Compliance Evaluation Inspection - Treatment, Storage and Disposal
Action Date: 11/19/2003
Violation Class: No Violations
RTC Date: Not reported

Action Type: Compliance Evaluation Inspection - Treatment, Storage and Disposal
Action Date: 03/04/2008
Violation Class: No Violations
RTC Date: Not reported

Action Type: Compliance Evaluation Inspection - Treatment, Storage and Disposal
Action Date: 11/19/2008
Violation Class: No Violations
RTC Date: Not reported

Action Type: Compliance Evaluation Inspection - Treatment, Storage and Disposal
Action Date: 04/12/2011
Violation Class: No Violations
RTC Date: Not reported

Action Type: Compliance Evaluation Inspection - Treatment, Storage and Disposal
Action Date: 06/27/2000
Violation Class: No Violations
RTC Date: Not reported

Action Type: Compliance Evaluation Inspection - Treatment, Storage and Disposal
Action Date: 02/16/1999

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Violation Class: No Violations
RTC Date: Not reported

Action Type: Compliance Evaluation Inspection - Treatment, Storage and Disposal
Action Date: 09/14/2004
Violation Class: No Violations
RTC Date: Not reported

Action Type: Compliance Evaluation Inspection - Treatment, Storage and Disposal
Action Date: 09/30/2009
Violation Class: No Violations
RTC Date: Not reported

Action Type: Compliance Evaluation Inspection - Treatment, Storage and Disposal
Action Date: 02/07/2007
Violation Class: No Violations
RTC Date: Not reported

Action Type: Compliance Evaluation Inspection - Treatment, Storage and Disposal
Action Date: 04/02/2012
Violation Class: No Violations
RTC Date: Not reported

Action Type: Compliance Evaluation Inspection - Treatment, Storage and Disposal
Action Date: 04/16/2013
Violation Class: No Violations
RTC Date: Not reported

Action Type: Compliance Evaluation Inspection - Treatment, Storage and Disposal
Action Date: 12/10/2013
Violation Class: No Violations
RTC Date: Not reported

Action Type: Compliance Evaluation Inspection - Treatment, Storage and Disposal
Action Date: 06/14/2016
Violation Class: No Violations
RTC Date: Not reported

Action Type: Compliance Evaluation Inspection - Treatment, Storage and Disposal
Action Date: 11/14/2017
Violation Class: Class 2, Minor
RTC Date: 12/15/2017

Action Type: Compliance Evaluation Inspection - Treatment, Storage and Disposal
Action Date: 12/20/2016
Violation Class: No Violations
RTC Date: Not reported

Action Type: Compliance Evaluation Inspection - Treatment, Storage and Disposal
Action Date: 11/18/2014
Violation Class: Class 2
RTC Date: 11/20/2014

Action Type: Compliance Evaluation Inspection - Treatment, Storage and Disposal
Action Date: 11/26/2018
Violation Class: Minor
RTC Date: 12/04/2018

EDWARDS AIR FORCE BASE (Continued) **1000155217**

Action Type: Compliance Evaluation Inspection - Treatment, Storage and Disposal
Action Date: 12/03/2019
Violation Class: Minor
RTC Date: 06/29/2020

PFAS:
Name: EDWARDS AIR FORCE BASE - IR/MMRP
Address: 470 SQ MI; 60 MI NE OF LOS ANGELES
City,State,Zip: EDWARDS, CA 93523
Envirostor ID: 15970001
Program Type: FEDERAL SUPERFUND - LISTED
Status: ACTIVE - LAND USE RESTRICTIONS
Status Date: 05/01/1986
Enviroscreen Score: 46-50%
Site Code: 100052
Global ID: Not reported
Facility Region: Not reported
Lead Agency: Not reported
Case worker: Not reported
Local Agency: Not reported
Location Case Number: Not reported
File Location: Not reported
Potential Contaminants of Concern: Not reported
Potential Media Affected: Not reported
Site History: Not reported

Begin Date: Not reported
RB Case Number: Not reported
source_type: Envirostor
Latitude: 34.906044444
Longitude: -117.88250833
Geo Tracker URL: Not reported

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1 NNW < 1/8 0.020 mi. 104 ft. **DUNGAN TRUCKING** **CUPA Listings** **S124935121**
749 SOPP RD **HWTS** **N/A**
MOJAVE, CA 93501

Relative: Lower
Actual: 2555 ft.

KERN CO CUPA:
Facility ID: FA0037833
CERS ID: 10418599
Name: A&T GLOBAL
Address: 749 SOPP RD
Address 2: Not reported
City,State,Zip: MOJAVE, CA
Billing Status: Inactive, non-billable
Program Element: BUS PLAN SMALL LOW RISK 1 UNIT
Program Element Code: CB1T
HMIRRP Due Date: 3/31
Current Inspection Date: 05/01/2016
Employee: BLAIR
Mailing Address: 749 sopp rd
Mailing Address 2: Not reported
Mailing City: mojave
Mailing State: ca

DUNGAN TRUCKING (Continued) **S124935121**

Mailing Zip: 93501

HWTS:
Name: DUNGAN TRUCKING
Address: 749 SOPP RD
Address 2: Not reported
City,State,Zip: MOJAVE, CA 935010000
EPA ID: CAL913475894
Inactive Date: 06/30/2002
Create Date: 12/13/1991
Last Act Date: 04/24/2003
Mailing Name: Not reported
Mailing Address: 325 W E ST
Mailing Address 2: Not reported
Mailing City,State,Zip: TEHACHAPI, CA 935611611
Owner Name: PRESTON DUNGAN
Owner Address: 325 W E ST
Owner Address 2: Not reported
Owner City,State,Zip: TEHACHAPI, CA 935610000
Contact Name: PRESTON B DUNGAN
Contact Address: 325 WEST E ST
Contact Address 2: Not reported
City,State,Zip: TEHACHAPI, CA 935610000

---

2 **ACCOUNT AUTO** **RCRA-SQG** **1000594452**
NW **8201 SIERRA HWY** **FINDS** **CAD983582826**
1/8-1/4 **MOJAVE, CA 93501** **ECHO**
0.248 mi. **HAZNET**
1310 ft. **HWTS**

Relative: **Higher**
Actual: **2562 ft.**

RCRA-SQG:
Date Form Received by Agency: 1991-05-28 00:00:00.0
Handler Name: ACCOUNT AUTO
Handler Address: 8201 SIERRA HWY
Handler City,State,Zip: MOJAVE, CA 93501
EPA ID: CAD983582826
Contact Name: CARMEN EDMAN
Contact Address: 8201 SIERRA HWY
Contact City,State,Zip: MOJAVE, CA 93501
Contact Telephone: 805-824-8888
Contact Fax: Not reported
Contact Email: Not reported
Contact Title: Not reported
EPA Region: 09
Land Type: Other
Federal Waste Generator Description: Small Quantity Generator
Non-Notifier: Not reported
Biennial Report Cycle: Not reported
Accessibility: Not reported
Active Site Indicator: Handler Activities
State District Owner: CA
State District: 5
Mailing Address: P O BOX 1876
Mailing City,State,Zip: ROSAMOND, CA 93560
Owner Name: SIDBE INC
Owner Type: Private
Operator Name: NOT REQUIRED

ACCOUNT AUTO (Continued) **1000594452**

Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	2002-06-27 03:35:10.0
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	Not reported

ACCOUNT AUTO (Continued) **1000594452**

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	NOT REQUIRED
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	SIDBE INC
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	1991-05-28 00:00:00.0
Handler Name:	ACCOUNT AUTO
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	CA
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Codes:	No NAICS Codes Found

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

FINDS:

Registry ID:	110002844708

Click Here:

ACCOUNT AUTO (Continued) **1000594452**

Environmental Interest/Information System:
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000594452
Registry ID:	110002844708
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110002844708
Name:	ACCOUNT AUTO
Address:	8201 SIERRA HWY
City,State,Zip:	MOJAVE, CA 93501

HAZNET:

Name:	ACCOUNT AUTO
Address:	8201 SIERRA HWY
Address 2:	Not reported
City,State,Zip:	MOJAVE, CA 935010000
Contact:	NOT REQUIRED
Telephone:	4155551212
Mailing Name:	Not reported
Mailing Address:	PO BOX 1876
Year:	1995
Gepaid:	CAD983582826
TSD EPA ID:	CAT000613893
CA Waste Code:	212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
Disposal Method:	H01 - Transfer Station
Tons:	0.2295
Year:	1994
Gepaid:	CAD983582826
TSD EPA ID:	CAT000613893
CA Waste Code:	212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
Disposal Method:	H01 - Transfer Station
Tons:	0.1635
Year:	1993
Gepaid:	CAD983582826
TSD EPA ID:	CAT000613893
CA Waste Code:	212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
Disposal Method:	H01 - Transfer Station
Tons:	0.3
Year:	1992
Gepaid:	CAD983582826
TSD EPA ID:	CAT000613893
CA Waste Code:	212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
Disposal Method:	H01 - Transfer Station
Tons:	0.327

ACCOUNT AUTO (Continued) **1000594452**

Additional Info:

Year:	1994
Gen EPA ID:	CAD983582826
Shipment Date:	19940209
Creation Date:	9/15/1995 0:00:00
Receipt Date:	19940211
Manifest ID:	93195905
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613893
Trans Name:	Not reported
TSDF Alt EPA ID:	CAT000613893
TSDF Alt Name:	Not reported
Waste Code Description:	212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.
RCRA Code:	F005
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.1635
Waste Quantity:	327
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	1995
Gen EPA ID:	CAD983582826
Shipment Date:	19950316
Creation Date:	10/23/1995 0:00:00
Receipt Date:	19950320
Manifest ID:	95092043
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613893
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.
RCRA Code:	F005
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.054
Waste Quantity:	108
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

ACCOUNT AUTO (Continued) **1000594452**

Shipment Date:	19950216
Creation Date:	10/20/1995 0:00:00
Receipt Date:	19950220
Manifest ID:	95045588
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613893
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.
RCRA Code:	F005
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.162
Waste Quantity:	324
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19950216
Creation Date:	10/20/1995 0:00:00
Receipt Date:	19950220
Manifest ID:	95045588
Trans EPA ID:	ILD984908202
Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613893
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.
RCRA Code:	F005
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0135
Waste Quantity:	27
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	1993
Gen EPA ID:	CAD983582826

Shipment Date:	19930902
Creation Date:	9/12/1995 0:00:00
Receipt Date:	19930907
Manifest ID:	93034463
Trans EPA ID:	ILD984908202

ACCOUNT AUTO (Continued) **1000594452**

Trans Name:	Not reported
Trans 2 EPA ID:	ILD984908202
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613893
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.
RCRA Code:	F005
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0885
Waste Quantity:	177
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19930511
Creation Date:	9/7/1995 0:00:00
Receipt Date:	19930517
Manifest ID:	92583444
Trans EPA ID:	ILD051060408
Trans Name:	Not reported
Trans 2 EPA ID:	ILD051060408
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613893
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.
RCRA Code:	F005
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0615
Waste Quantity:	123
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19930413
Creation Date:	9/6/1995 0:00:00
Receipt Date:	19930415
Manifest ID:	92574139
Trans EPA ID:	ILD051060408
Trans Name:	Not reported
Trans 2 EPA ID:	ILD051060408
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613893
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.
RCRA Code:	F005

ACCOUNT AUTO (Continued) **1000594452**

Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0615
Waste Quantity:	123
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19930316
Creation Date:	9/1/1995 0:00:00
Receipt Date:	19930322
Manifest ID:	92542261
Trans EPA ID:	ILD051060408
Trans Name:	Not reported
Trans 2 EPA ID:	ILD051060408
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT000613893
Trans Name:	Not reported
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.
RCRA Code:	F005
Meth Code:	H01 - Transfer Station
Quantity Tons:	0.0885
Waste Quantity:	177
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

HWTS:

Name:	ACCOUNT AUTO
Address:	8201 SIERRA HWY
Address 2:	Not reported
City,State,Zip:	MOJAVE, CA 935010000
EPA ID:	CAD983582826
Inactive Date:	06/30/1998
Create Date:	05/28/1991
Last Act Date:	08/10/2004
Mailing Name:	Not reported
Mailing Address:	PO BOX 1876
Mailing Address 2:	Not reported
Mailing City,State,Zip:	ROSAMOND, CA 935601876
Owner Name:	SIDBE INC
Owner Address:	NOT REQUIRED
Owner Address 2:	Not reported
Owner City,State,Zip:	NOT REQUIRED, ME 999990000
Contact Name:	NOT REQUIRED
Contact Address:	INACT PER 98VQ FINAL NOTICE
Contact Address 2:	- BATCH 4/27
City,State,Zip:	NOT REQUIRED, ME 999990000

Count: 2 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
ROSAMOND	S100714218	SWEETSER ROAD UNAUTHORIZED DISPOSA	SWEETSER RD NEAR HWY 14 & FRON	93560	ENVIROSTOR
ROSAMOND	1003879424	AVENUE A	1/2 MI W OF W 10TH ST ALONG AV	93560	SEMS-ARCHIVE

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 07/29/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 08/25/2020
Number of Days to Update: 22

Source: EPA
Telephone: N/A
Last EDR Contact: 11/05/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 07/29/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 08/25/2020
Number of Days to Update: 22

Source: EPA
Telephone: N/A
Last EDR Contact: 11/05/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 07/29/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 08/25/2020
Number of Days to Update: 22

Source: EPA
Telephone: N/A
Last EDR Contact: 11/05/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 04/03/2019
Date Data Arrived at EDR: 04/05/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 07/29/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 08/25/2020
Number of Days to Update: 22

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 11/05/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 07/29/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 08/25/2020
Number of Days to Update: 22

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 11/05/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 06/15/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 87

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/15/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/18/2020
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/15/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/18/2020
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 06/15/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/18/2020
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/15/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/18/2020
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 08/06/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 11/11/2020
Number of Days to Update: 82

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 11/05/2020
Next Scheduled EDR Contact: 02/22/2021
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 02/13/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 11/05/2020
Next Scheduled EDR Contact: 12/07/2020
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 02/13/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 11/05/2020
Next Scheduled EDR Contact: 12/07/2020
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 06/15/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 87

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 07/27/2020
Date Data Arrived at EDR: 07/27/2020
Date Made Active in Reports: 10/08/2020
Number of Days to Update: 73

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/26/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 07/27/2020
Date Data Arrived at EDR: 07/27/2020
Date Made Active in Reports: 10/08/2020
Number of Days to Update: 73

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/26/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 05/11/2020
Date Data Arrived at EDR: 05/12/2020
Date Made Active in Reports: 07/27/2020
Number of Days to Update: 76

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 11/10/2020
Next Scheduled EDR Contact: 02/22/2021
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List
Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

LUST REG 1: Active Toxic Site Investigation
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)

Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Quarterly

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/14/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/29/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/14/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84
Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 04/14/2020
Date Data Arrived at EDR: 05/26/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 78
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/08/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/14/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/15/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/08/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)
Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35
Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36
Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11
Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17
Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: No Update Planned

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 02/01/2020
Date Data Arrived at EDR: 03/19/2020
Date Made Active in Reports: 06/09/2020
Number of Days to Update: 82
Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)
Military ust sites

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/20/2020
Number of Days to Update: 72

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Semi-Annually

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases

UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 05/26/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/20/2020
Number of Days to Update: 72

Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 09/15/2020
Next Scheduled EDR Contact: 12/28/2020
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 04/14/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 85

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/29/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/08/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/03/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 04/14/2020
Date Data Arrived at EDR: 05/26/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 78

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/08/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/14/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/14/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 09/16/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties
Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 07/27/2020
Date Data Arrived at EDR: 07/27/2020
Date Made Active in Reports: 10/08/2020
Number of Days to Update: 73

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/26/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Quarterly

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 06/22/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/04/2020
Number of Days to Update: 74

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/01/2020
Date Data Arrived at EDR: 06/02/2020
Date Made Active in Reports: 06/09/2020
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 09/15/2020
Next Scheduled EDR Contact: 12/28/2020
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database
Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 10/20/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 05/28/2020
Date Data Arrived at EDR: 05/29/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 75

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 11/05/2020
Next Scheduled EDR Contact: 02/22/2021
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 10/20/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Varies

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 10/30/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 03/18/2020
Date Data Arrived at EDR: 03/19/2020
Date Made Active in Reports: 06/09/2020
Number of Days to Update: 82

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/19/2020
Next Scheduled EDR Contact: 12/07/2020
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 07/27/2020
Date Data Arrived at EDR: 07/27/2020
Date Made Active in Reports: 10/08/2020
Number of Days to Update: 73

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/26/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 06/30/2019
Date Data Arrived at EDR: 05/28/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 11/11/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Varies

CERS HAZ WASTE: CERS HAZ WASTE

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 07/20/2020
Date Data Arrived at EDR: 07/21/2020
Date Made Active in Reports: 10/07/2020
Number of Days to Update: 78

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 03/18/2020
Date Data Arrived at EDR: 03/19/2020
Date Made Active in Reports: 06/09/2020
Number of Days to Update: 82

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/19/2020
Next Scheduled EDR Contact: 12/07/2020
Data Release Frequency: Quarterly

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 05/20/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/06/2020
Number of Days to Update: 78

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 08/17/2020
Next Scheduled EDR Contact: 12/07/2020
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing
Aboveground storage tank sites

Date of Government Version: 08/03/2020
Date Data Arrived at EDR: 08/05/2020
Date Made Active in Reports: 10/22/2020
Number of Days to Update: 78

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Varies

CERS TANKS: California Environmental Reporting System (CERS) Tanks
List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 07/20/2020
Date Data Arrived at EDR: 07/21/2020
Date Made Active in Reports: 10/07/2020
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Quarterly

CA FID UST: Facility Inventory Database
The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing
A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 05/28/2020
Date Data Arrived at EDR: 05/29/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 75

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/25/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 07/29/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 08/25/2020
Number of Days to Update: 22

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 11/05/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 06/01/2020
Date Data Arrived at EDR: 06/02/2020
Date Made Active in Reports: 08/14/2020
Number of Days to Update: 73
Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 08/31/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/22/2020
Date Data Arrived at EDR: 06/23/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 86
Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 06/30/2020
Date Data Arrived at EDR: 07/21/2020
Date Made Active in Reports: 10/07/2020
Number of Days to Update: 78
Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71
Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 06/15/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/18/2020
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 08/05/2020
Date Data Arrived at EDR: 08/13/2020
Date Made Active in Reports: 10/21/2020
Number of Days to Update: 69

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 08/13/2020
Next Scheduled EDR Contact: 11/30/2020
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 10/08/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 11/09/2020
Next Scheduled EDR Contact: 02/22/2021
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 06/15/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/10/2020
Number of Days to Update: 80

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 11/02/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 11/06/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/17/2020
Date Made Active in Reports: 09/10/2020
Number of Days to Update: 85

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 09/18/2020
Next Scheduled EDR Contact: 12/28/2020
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 08/14/2020
Date Made Active in Reports: 11/04/2020
Number of Days to Update: 82
Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 08/14/2020
Next Scheduled EDR Contact: 11/30/2020
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 07/20/2020
Date Data Arrived at EDR: 07/21/2020
Date Made Active in Reports: 10/08/2020
Number of Days to Update: 79
Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 07/29/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 08/25/2020
Number of Days to Update: 22
Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 11/05/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 07/24/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 10/21/2020
Number of Days to Update: 79
Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 10/14/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35
Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 04/27/2020
Date Data Arrived at EDR: 05/06/2020
Date Made Active in Reports: 06/09/2020
Number of Days to Update: 34

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 11/05/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 10/09/2019
Date Data Arrived at EDR: 10/11/2019
Date Made Active in Reports: 12/20/2019
Number of Days to Update: 70

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/05/2020
Date Data Arrived at EDR: 08/10/2020
Date Made Active in Reports: 10/08/2020
Number of Days to Update: 59

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 01/31/2021
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 01/15/2020
Number of Days to Update: 42
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 09/04/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 08/31/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 11/06/2021
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 09/24/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 10/27/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/30/2020
Date Data Arrived at EDR: 07/15/2020
Date Made Active in Reports: 07/21/2020
Number of Days to Update: 6

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 09/28/2017
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 10/06/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017
Date Data Arrived at EDR: 09/11/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 3

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 11/06/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 08/21/2020
Next Scheduled EDR Contact: 11/30/2020
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 07/29/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 08/25/2020
Number of Days to Update: 22

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 11/05/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 05/01/2020
Date Data Arrived at EDR: 05/21/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 84

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 08/25/2020
Next Scheduled EDR Contact: 12/07/2020
Data Release Frequency: Semi-Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 05/28/2020
Date Data Arrived at EDR: 05/28/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 77

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 09/10/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Quarterly

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 05/06/2020
Date Data Arrived at EDR: 05/27/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 78

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 08/28/2020
Next Scheduled EDR Contact: 12/07/2020
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 08/28/2020
Next Scheduled EDR Contact: 12/07/2020
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 06/22/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/10/2020
Number of Days to Update: 80

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 09/16/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 02/03/2020
Date Data Arrived at EDR: 03/03/2020
Date Made Active in Reports: 05/28/2020
Number of Days to Update: 86

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 09/15/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 07/02/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 77

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 10/08/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Varies

DOCKET HWC: Hazardous Waste Compliance Docket Listing
A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 07/26/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 71
Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 08/19/2020
Next Scheduled EDR Contact: 12/07/2020
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information
ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 06/27/2020
Date Data Arrived at EDR: 07/02/2020
Date Made Active in Reports: 09/28/2020
Number of Days to Update: 88
Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 10/06/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing
This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 08/17/2020
Date Data Arrived at EDR: 08/17/2020
Date Made Active in Reports: 10/21/2020
Number of Days to Update: 65
Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 11/13/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan
Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6
Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 06/22/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/04/2020
Number of Days to Update: 74
Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 09/23/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing
list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 05/01/2019
Date Data Arrived at EDR: 05/14/2019
Date Made Active in Reports: 07/17/2019
Number of Days to Update: 64
Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 11/13/2020
Next Scheduled EDR Contact: 02/22/2021
Data Release Frequency: Varies

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 08/19/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 09/04/2020
Number of Days to Update: 14

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 08/17/2020
Next Scheduled EDR Contact: 12/07/2020
Data Release Frequency: Varies

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 08/25/2020
Date Data Arrived at EDR: 08/26/2020
Date Made Active in Reports: 11/13/2020
Number of Days to Update: 79

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 08/25/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities
A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 06/04/2020
Date Data Arrived at EDR: 06/05/2020
Date Made Active in Reports: 08/17/2020
Number of Days to Update: 73

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 08/24/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Annually

EMI: Emissions Inventory Data
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 06/16/2020
Date Made Active in Reports: 08/28/2020
Number of Days to Update: 73

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 09/18/2020
Next Scheduled EDR Contact: 12/28/2020
Data Release Frequency: Varies

ENF: Enforcement Action Listing
A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 07/20/2020
Date Data Arrived at EDR: 07/21/2020
Date Made Active in Reports: 10/07/2020
Number of Days to Update: 78

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing
Financial Assurance information

Date of Government Version: 07/13/2020
Date Data Arrived at EDR: 07/16/2020
Date Made Active in Reports: 09/29/2020
Number of Days to Update: 75

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing
A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 08/05/2020
Date Data Arrived at EDR: 08/05/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 79

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 11/04/2020
Next Scheduled EDR Contact: 02/22/2021
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 04/15/2020
Date Made Active in Reports: 07/02/2020
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 10/05/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 08/17/2020
Date Data Arrived at EDR: 08/17/2020
Date Made Active in Reports: 11/05/2020
Number of Days to Update: 80

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 11/13/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 08/17/2020
Date Data Arrived at EDR: 08/17/2020
Date Made Active in Reports: 11/05/2020
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 11/13/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 07/06/2020
Date Data Arrived at EDR: 07/07/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 72

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 10/06/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing
A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71
Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing
The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 05/28/2020
Date Data Arrived at EDR: 06/02/2020
Date Made Active in Reports: 08/14/2020
Number of Days to Update: 73
Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 08/31/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Varies

NPDES: NPDES Permits Listing
A listing of NPDES permits, including stormwater.

Date of Government Version: 08/10/2020
Date Data Arrived at EDR: 08/10/2020
Date Made Active in Reports: 10/29/2020
Number of Days to Update: 80
Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 11/09/2020
Next Scheduled EDR Contact: 02/22/2021
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing
A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 06/01/2020
Date Data Arrived at EDR: 06/02/2020
Date Made Active in Reports: 08/14/2020
Number of Days to Update: 73
Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 08/31/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 08/21/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 08/27/2020
Number of Days to Update: 6
Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 08/20/2020
Next Scheduled EDR Contact: 12/28/2020
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 06/06/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/20/2020
Number of Days to Update: 72
Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)
Underground control injection sites

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71
Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 11/19/2019
Date Data Arrived at EDR: 01/07/2020
Date Made Active in Reports: 03/09/2020
Number of Days to Update: 62
Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 10/09/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9
Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 11/13/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13
Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 09/16/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)
Projects sites

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing

In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/20/2020
Number of Days to Update: 72

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 06/01/2020
Date Data Arrived at EDR: 06/02/2020
Date Made Active in Reports: 08/14/2020
Number of Days to Update: 73

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 08/31/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 07/20/2020
Date Data Arrived at EDR: 07/21/2020
Date Made Active in Reports: 10/07/2020
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)
Produced water ponds sites

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)
Sampling point - public sites

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)
Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

PCS INACTIVE: Listing of Inactive PCS Permits
An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014
Date Data Arrived at EDR: 01/06/2015
Date Made Active in Reports: 05/06/2015
Number of Days to Update: 120

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Semi-Annually

PCS ENF: Enforcement data
No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Varies

MINES MRDS: Mineral Resources Data System
Mineral Resources Data System

Date of Government Version: 04/06/2018
Date Data Arrived at EDR: 10/21/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 3

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 08/28/2020
Next Scheduled EDR Contact: 12/07/2020
Data Release Frequency: Varies

HWTS: Hazardous Waste Tracking System
DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.

Date of Government Version: 10/13/2020
Date Data Arrived at EDR: 10/14/2020
Date Made Active in Reports: 11/03/2020
Number of Days to Update: 20

Source: Department of Toxic Substances Control
Telephone: 916-324-2444
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Varies

PCS: Permit Compliance System

PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 55

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Semi-Annually

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 06/30/2020
Date Data Arrived at EDR: 07/01/2020
Date Made Active in Reports: 07/17/2020
Number of Days to Update: 16

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List
Cupa Facility List

Date of Government Version: 05/18/2020
Date Data Arrived at EDR: 05/19/2020
Date Made Active in Reports: 06/01/2020
Number of Days to Update: 13

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing
Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 06/17/2020
Date Data Arrived at EDR: 06/18/2020
Date Made Active in Reports: 09/02/2020
Number of Days to Update: 76

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/06/2020
Date Data Arrived at EDR: 04/23/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 78

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 07/16/2020
Date Data Arrived at EDR: 07/22/2020
Date Made Active in Reports: 10/08/2020
Number of Days to Update: 78

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 10/20/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 08/13/2020
Date Made Active in Reports: 10/22/2020
Number of Days to Update: 70

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 10/20/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List
CUPA facility list.

Date of Government Version: 08/13/2020
Date Data Arrived at EDR: 08/13/2020
Date Made Active in Reports: 10/22/2020
Number of Days to Update: 70

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 10/20/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 06/30/2020
Date Data Arrived at EDR: 07/01/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 78

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List
CUPA facility list.

Date of Government Version: 08/13/2020
Date Data Arrived at EDR: 08/17/2020
Date Made Active in Reports: 11/05/2020
Number of Days to Update: 80

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 11/11/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List
Cupa facility list.

Date of Government Version: 07/14/2020
Date Data Arrived at EDR: 07/16/2020
Date Made Active in Reports: 09/29/2020
Number of Days to Update: 75

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 11/11/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Varies

KERN COUNTY:

CUPA KERN: CUPA Facility List
A listing of sites included in the Kern County Hazardous Material Business Plan.

Date of Government Version: 07/28/2020
Date Data Arrived at EDR: 07/30/2020
Date Made Active in Reports: 10/13/2020
Number of Days to Update: 75

Source: Kern County Public Health
Telephone: 661-321-3000
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Varies

UST KERN: Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 07/28/2020
Date Data Arrived at EDR: 07/30/2020
Date Made Active in Reports: 10/14/2020
Number of Days to Update: 76

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 05/11/2020
Date Data Arrived at EDR: 05/12/2020
Date Made Active in Reports: 07/27/2020
Number of Days to Update: 76

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 11/11/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List
Cupa facility list

Date of Government Version: 08/13/2020
Date Data Arrived at EDR: 08/13/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 71

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 10/07/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List
Cupa facility list

Date of Government Version: 07/31/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 11/09/2020
Number of Days to Update: 80

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 09/10/2020
Next Scheduled EDR Contact: 12/28/2020
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 07/06/2020
Date Data Arrived at EDR: 07/10/2020
Date Made Active in Reports: 09/28/2020
Number of Days to Update: 80

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 07/13/2020
Date Data Arrived at EDR: 07/13/2020
Date Made Active in Reports: 09/29/2020
Number of Days to Update: 78

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 10/09/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 08/17/2020
Date Made Active in Reports: 11/05/2020
Number of Days to Update: 80

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 10/07/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Varies

LOS ANGELES AST: Active & Inactive AST Inventory
A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58
Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/25/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Varies

LOS ANGELES CO LF METHANE: Methane Producing Landfills
This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 04/30/2012
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 42
Source: Los Angeles County Department of Public Works
Telephone: 626-458-6973
Last EDR Contact: 10/12/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory
A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58
Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/25/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory
A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58
Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/25/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 03/25/2020
Date Data Arrived at EDR: 04/14/2020
Date Made Active in Reports: 07/01/2020
Number of Days to Update: 78
Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 10/09/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21
Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 10/07/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 65

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 06/27/2019
Date Data Arrived at EDR: 07/30/2019
Date Made Active in Reports: 10/02/2019
Number of Days to Update: 64

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 10/05/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/10/2020
Date Data Arrived at EDR: 08/12/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 72

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 11/11/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/02/2018
Number of Days to Update: 29

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 09/23/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 07/28/2020
Date Data Arrived at EDR: 07/30/2020
Date Made Active in Reports: 07/31/2020
Number of Days to Update: 1

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 11/11/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 08/20/2020
Date Data Arrived at EDR: 08/24/2020
Date Made Active in Reports: 11/09/2020
Number of Days to Update: 77

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 08/19/2020
Next Scheduled EDR Contact: 12/07/2020
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 07/13/2020
Date Data Arrived at EDR: 07/15/2020
Date Made Active in Reports: 07/31/2020
Number of Days to Update: 16

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 09/23/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 08/19/2020
Next Scheduled EDR Contact: 12/07/2020
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 08/19/2020
Next Scheduled EDR Contact: 12/07/2020
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List
CUPA facility list.

Date of Government Version: 07/29/2020
Date Data Arrived at EDR: 07/30/2020
Date Made Active in Reports: 10/13/2020
Number of Days to Update: 75

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 10/20/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 06/10/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 10/19/2020
Number of Days to Update: 77

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 11/02/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 07/02/2020
Date Data Arrived at EDR: 08/05/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 79

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 11/02/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 07/01/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 10/19/2020
Number of Days to Update: 77

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 11/03/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/10/2020
Date Made Active in Reports: 08/24/2020
Number of Days to Update: 75

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 08/25/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 10/06/2020
Date Data Arrived at EDR: 10/07/2020
Date Made Active in Reports: 11/03/2020
Number of Days to Update: 27

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/15/2020
Next Scheduled EDR Contact: 12/28/2020
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 10/06/2020
Date Data Arrived at EDR: 10/07/2020
Date Made Active in Reports: 11/03/2020
Number of Days to Update: 27
Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/10/2020
Next Scheduled EDR Contact: 12/28/2020
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 02/18/2020
Date Data Arrived at EDR: 03/31/2020
Date Made Active in Reports: 06/15/2020
Number of Days to Update: 76
Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 02/24/2020
Date Data Arrived at EDR: 03/31/2020
Date Made Active in Reports: 06/17/2020
Number of Days to Update: 78
Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List
Cupa facility list

Date of Government Version: 08/04/2020
Date Data Arrived at EDR: 08/05/2020
Date Made Active in Reports: 10/22/2020
Number of Days to Update: 78
Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 08/04/2020
Date Data Arrived at EDR: 08/05/2020
Date Made Active in Reports: 10/26/2020
Number of Days to Update: 82
Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 06/01/2020
Date Data Arrived at EDR: 06/02/2020
Date Made Active in Reports: 08/14/2020
Number of Days to Update: 73

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 08/31/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 04/18/2018
Date Data Arrived at EDR: 04/24/2018
Date Made Active in Reports: 06/19/2018
Number of Days to Update: 56

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 11/05/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 07/14/2020
Date Data Arrived at EDR: 07/16/2020
Date Made Active in Reports: 09/29/2020
Number of Days to Update: 75

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 08/25/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 08/03/2020
Date Data Arrived at EDR: 08/05/2020
Date Made Active in Reports: 10/22/2020
Number of Days to Update: 78

Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Varies

LUST SAN FRANCISCO: Local Oversite Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 08/03/2020
Date Data Arrived at EDR: 08/05/2020
Date Made Active in Reports: 10/26/2020
Number of Days to Update: 82

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 09/10/2020
Next Scheduled EDR Contact: 12/28/2020
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List
Cupa Facility List.

Date of Government Version: 07/27/2020
Date Data Arrived at EDR: 08/12/2020
Date Made Active in Reports: 10/26/2020
Number of Days to Update: 75

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 11/11/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 02/20/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 64

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 09/11/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 03/29/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 61

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 09/01/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 11/11/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List
Cupa facility list

Date of Government Version: 08/20/2020
Date Data Arrived at EDR: 08/20/2020
Date Made Active in Reports: 11/09/2020
Number of Days to Update: 81

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 11/11/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 08/19/2020
Next Scheduled EDR Contact: 12/07/2020
Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 07/30/2020
Date Data Arrived at EDR: 07/31/2020
Date Made Active in Reports: 10/16/2020
Number of Days to Update: 77

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 11/11/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 11/11/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 08/13/2019
Number of Days to Update: 68

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 08/25/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 08/25/2020
Date Data Arrived at EDR: 08/26/2020
Date Made Active in Reports: 09/16/2020
Number of Days to Update: 21

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 08/25/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List
Cupa Facility list

Date of Government Version: 07/07/2020
Date Data Arrived at EDR: 07/08/2020
Date Made Active in Reports: 09/25/2020
Number of Days to Update: 79

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 09/16/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 07/01/2020
Date Data Arrived at EDR: 07/02/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 77

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 09/16/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List
Cupa facility list

Date of Government Version: 02/04/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 04/15/2020
Number of Days to Update: 70

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 05/26/2020
Date Data Arrived at EDR: 05/28/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 77

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 08/25/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List
Cupa facilities

Date of Government Version: 08/11/2020
Date Data Arrived at EDR: 08/12/2020
Date Made Active in Reports: 10/26/2020
Number of Days to Update: 75

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 11/11/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List
Cupa facility list

Date of Government Version: 07/14/2020
Date Data Arrived at EDR: 07/16/2020
Date Made Active in Reports: 09/29/2020
Number of Days to Update: 75

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List
Cupa program facilities

Date of Government Version: 08/06/2020
Date Data Arrived at EDR: 08/06/2020
Date Made Active in Reports: 10/26/2020
Number of Days to Update: 81

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 07/10/2020
Date Data Arrived at EDR: 07/22/2020
Date Made Active in Reports: 10/08/2020
Number of Days to Update: 78

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/23/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 11/05/2020
Next Scheduled EDR Contact: 02/22/2021
Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 07/10/2020
Date Data Arrived at EDR: 07/22/2020
Date Made Active in Reports: 10/07/2020
Number of Days to Update: 77

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 05/26/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/20/2020
Number of Days to Update: 72

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 06/23/2020
Date Data Arrived at EDR: 06/29/2020
Date Made Active in Reports: 09/15/2020
Number of Days to Update: 78

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 10/07/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 08/06/2020
Date Data Arrived at EDR: 08/07/2020
Date Made Active in Reports: 10/26/2020
Number of Days to Update: 80

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 11/03/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 08/10/2020
Date Data Arrived at EDR: 10/20/2020
Date Made Active in Reports: 11/02/2020
Number of Days to Update: 13

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 11/09/2020
Next Scheduled EDR Contact: 02/22/2021
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 10/09/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 04/29/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 72

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 10/30/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 10/07/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 10/02/2019
Date Made Active in Reports: 12/10/2019
Number of Days to Update: 69

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 11/11/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 09/02/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: Endeavor Business Media
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data
Source: Endeavor Business Media
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

860 SOPP RD.
860 SOPP RD.
ROSAMOND, CA 93560

TARGET PROPERTY COORDINATES

Latitude (North):	34.93383 - 34° 56' 1.79''
Longitude (West):	118.144766 - 118° 8' 41.16''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	395449.3
UTM Y (Meters):	3866105.8
Elevation:	2559 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5630773 SOLEDAD MOUNTAIN, CA
Version Date:	2012
East Map:	5630785 BISSELL, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

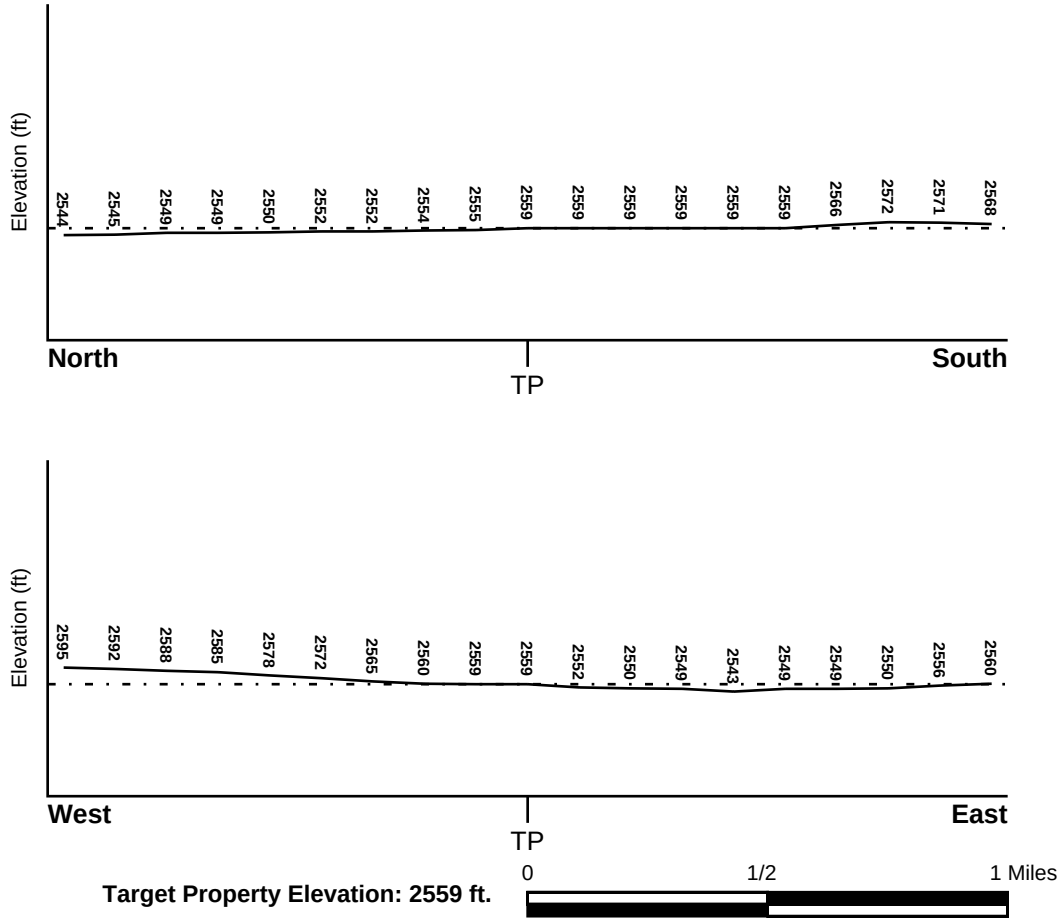
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General ENE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06029C3675E	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
Not Reported	

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
SOLEDAD MOUNTAIN	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

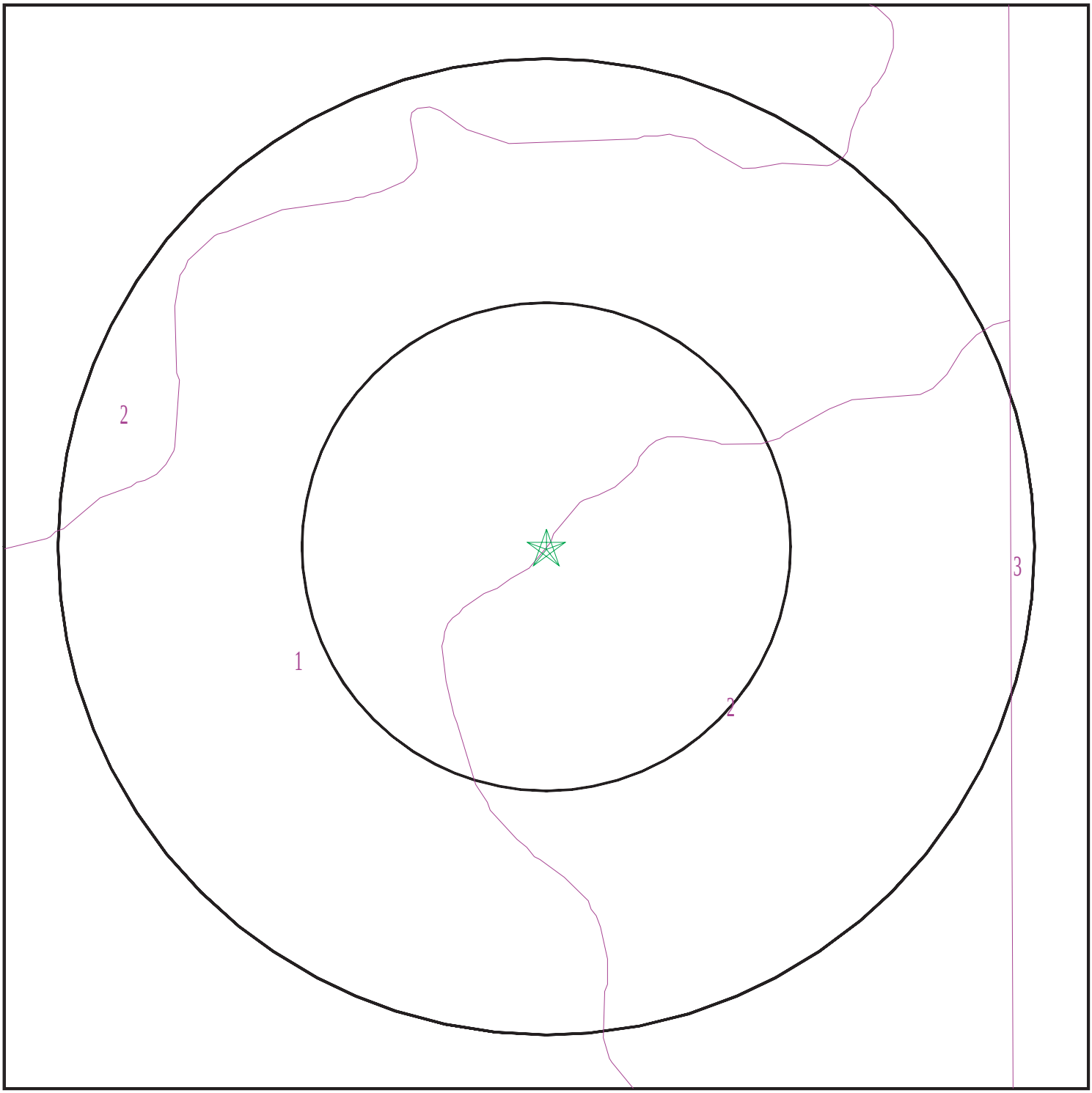
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 6267145.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	860 Sopp Rd.	CLIENT:	Partner Engineering and Science, Inc.
ADDRESS:	860 Sopp Rd. Rosamond CA 93560	CONTACT:	Alex Flores
LAT/LONG:	34.93383 / 118.144766	INQUIRY #:	6267145.2s
		DATE:	November 16, 2020 10:54 am

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: DESTAZO

Soil Surface Texture:
Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches		Not reported	Not reported	Max: 4 Min: 1.4	Max: 8.4 Min: 7.9
2	11 inches	51 inches		Not reported	Not reported	Max: 4 Min: 1.4	Max: 8.4 Min: 7.9
3	51 inches	64 inches		Not reported	Not reported	Max: 4 Min: 1.4	Max: 8.4 Min: 7.9

Soil Map ID: 2

Soil Component Name: CAJON

Soil Surface Texture:
Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	20 inches		Not reported	Not reported	Max: 141 Min: 42	Max: 8.4 Min: 7.4
2	20 inches	59 inches		Not reported	Not reported	Max: 141 Min: 42	Max: 8.4 Min: 7.4

Soil Map ID: 3

Soil Component Name: DESTAZO

Soil Surface Texture:

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches		Not reported	Not reported	Max: 4 Min: 1.4	Max: 8.4 Min: 7.9
2	11 inches	51 inches		Not reported	Not reported	Max: 4 Min: 1.4	Max: 8.4 Min: 7.9
3	51 inches	64 inches		Not reported	Not reported	Max: 4 Min: 1.4	Max: 8.4 Min: 7.9

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
B5	USGS40000158607	1/2 - 1 Mile NE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

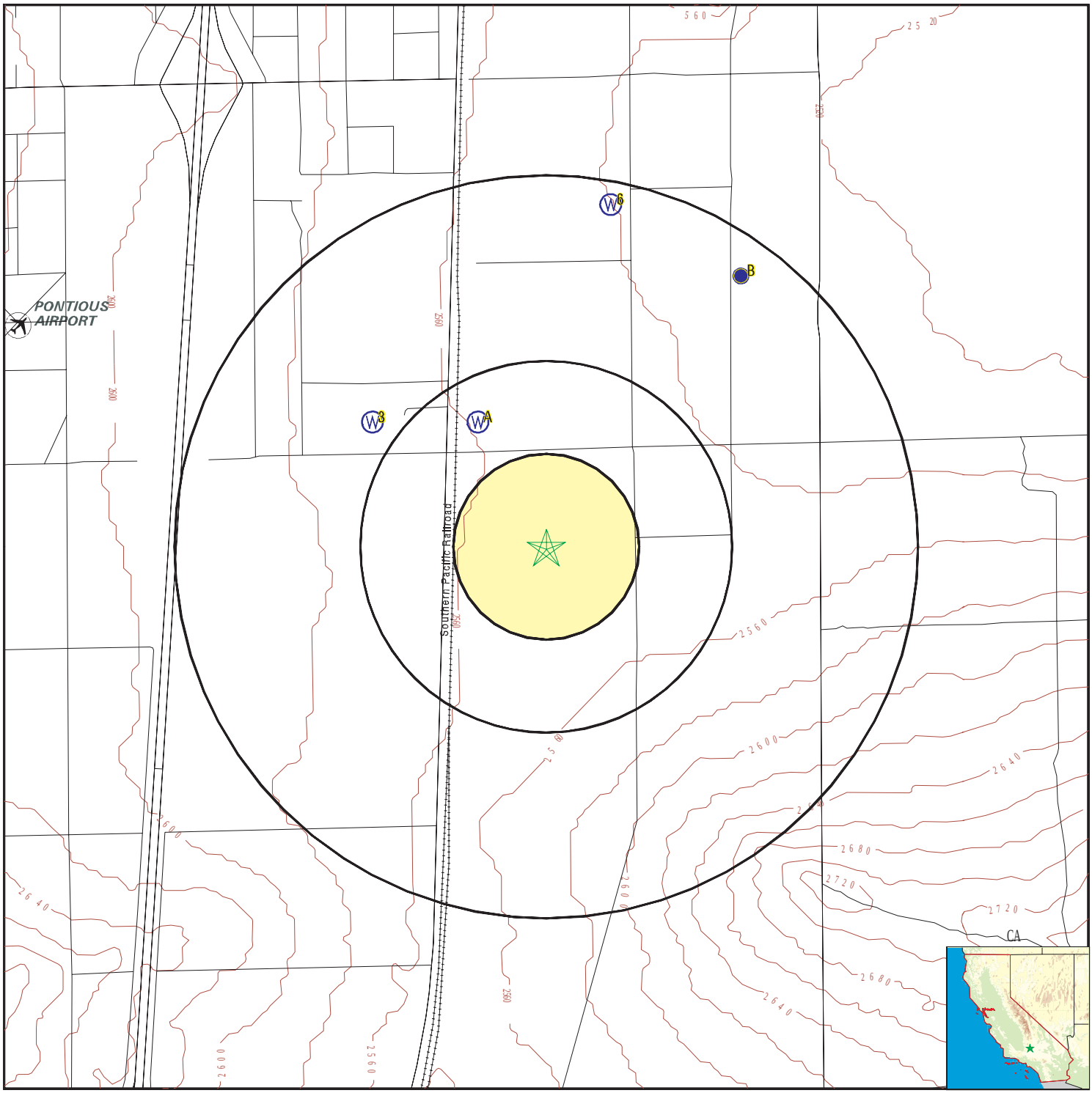
MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	CADWR0000033059	1/4 - 1/2 Mile NNW
A2	CADWR0000030849	1/4 - 1/2 Mile NNW
3	CADWR0000025893	1/2 - 1 Mile NW
B4	CADWR8000014988	1/2 - 1 Mile NE
6	9957	1/2 - 1 Mile North

PHYSICAL SETTING SOURCE MAP - 6267145.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	860 Sopp Rd.	CLIENT:	Partner Engineering and Science, Inc.
ADDRESS:	860 Sopp Rd. Rosamond CA 93560	CONTACT:	Alex Flores
LAT/LONG:	34.93383 / 118.144766	INQUIRY #:	6267145.2s
		DATE:	November 16, 2020 10:53 am

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A1
NNW
1/4 - 1/2 Mile
Higher

CA WELLS **CADWR0000033059**

Well ID:	10N12W22N001S	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	10N12W22N001S	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=10N12W22N001S&store_num=		
GeoTracker Data:	Not Reported		

A2
NNW
1/4 - 1/2 Mile
Higher

CA WELLS **CADWR0000030849**

Well ID:	10N12W22N002S	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	10N12W22N002S	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=10N12W22N002S&store_num=		
GeoTracker Data:	Not Reported		

3
NW
1/2 - 1 Mile
Higher

CA WELLS **CADWR0000025893**

Well ID:	10N12W21R001S	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	10N12W21R001S	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=10N12W21R001S&store_num=		
GeoTracker Data:	Not Reported		

B4
NE
1/2 - 1 Mile
Lower

CA WELLS **CADWR8000014988**

State Well #:	10N12W22J001S	Station ID:	14363
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Fremont Valley	Well Completion Rpt #:	Not Reported

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

B5
NE
1/2 - 1 Mile
Lower

FED USGS **USGS40000158607**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	010N012W22J001S	Type:	Well
Description:	Not Reported	HUC:	18090206
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Basin and Range basin-fill aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19560326	Well Depth:	230.55
Well Depth Units:	ft	Well Hole Depth:	242
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	39	Level reading date:	2004-03-29
Feet below surface:	47.85	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	2003-03-24	Feet below surface:	47.58
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2002-03-28	Feet below surface:	47.36
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-03-21	Feet below surface:	47.41
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-03-21	Feet below surface:	46.70
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-03-18	Feet below surface:	46.63
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1998-03-16	Feet below surface:	45.95
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-03-03	Feet below surface:	45.96
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1996-04-19	Feet below surface:	47.14
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1995-04-20	Feet below surface:	45.15
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1994-04-11	Feet below surface:	45.15
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1993-04-19	Feet below surface:	44.59
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1992-04-16	Feet below surface:	44.77
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-03-21	Feet below surface:	44.63
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1990-03-15	Feet below surface:	44.34
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1989-03-23	Feet below surface:	43.73
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1988-03-28	Feet below surface:	43.14
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1987-02-22	Feet below surface:	43.01
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1986-03-25	Feet below surface:	42.16
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1985-03-25	Feet below surface:	41.78
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1984-03-05	Feet below surface:	41.80
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-04-14	Feet below surface:	42.67
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-02-18	Feet below surface:	41.18
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-04-24	Feet below surface:	41.05
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-04-18	Feet below surface:	40.85
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-02-28	Feet below surface:	40.19
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-03-30	Feet below surface:	40.27
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-03-07	Feet below surface:	40.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-02-11	Feet below surface:	40.56
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-02-04	Feet below surface:	40.25
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-02-11	Feet below surface:	39.68
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-02-12	Feet below surface:	39.83
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-03-14	Feet below surface:	39.82
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-03-17	Feet below surface:	39.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-03-17	Feet below surface:	39.26
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1969-04-16	Feet below surface:	38.22
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1968-04-02	Feet below surface:	37.84
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1967-04-13	Feet below surface:	37.27
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1956-05-18	Feet below surface:	33.00
Feet to sea level:	Not Reported	Note:	Not Reported

6
North
1/2 - 1 Mile
Lower

CA WELLS 9957

Seq:	9957	Prim sta c:	10N/12W-22F04 S
Frds no:	1502235001	County:	15
District:	45	User id:	15C
System no:	1502235	Water type:	G
Source nam:	WELL 01	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	345650.0	Longitude:	1180827.0
Precision:	4	Status:	AR
Comment 1:	WELL IS LOCATED 500 FEET WEST OF LONE BUTTE ROAD AND .55 M NORTH OF SO		
Comment 2:	CA. 25		
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	1502235	System nam:	R And W Apartments
Hqname:	Not Reported	Address:	Not Reported
City:	Not Reported	State:	Not Reported
Zip:	Not Reported	Zip ext:	Not Reported
Pop serv:	0	Connection:	0
Area serve:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
93560	12	1

Federal EPA Radon Zone for KERN County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 93560

Number of sites tested: 2

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.250 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

Groundwater Ambient Monitoring & Assessment Program
State Water Resources Control Board
Telephone: 916-341-5577
The GAMA Program is Californias comprehensive groundwater quality monitoring program. GAMA collects data by testing the untreated, raw water in different types of wells for naturally-occurring and man-made chemicals. The GAMA data includes Domestic, Monitoring and Municipal well types from the following sources, Department of Water Resources, Department of Heath Services, EDF, Agricultural Lands, Lawrence Livermore National Laboratory, Department of Pesticide Regulation, United States Geological Survey, Groundwater Ambient Monitoring and Assessment Program and Local Groundwater Projects.

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

California Oil and Gas Well Locations
Source: Dept of Conservation, Geologic Energy Management Division
Telephone: 916-323-1779
Oil and Gas well locations in the state.

California Earthquake Fault Lines
Source: California Division of Mines and Geology
The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon
Source: Department of Public Health
Telephone: 916-210-8558
Radon Database for California

PHYSICAL SETTING SOURCE RECORDS SEARCHED

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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APPENDIX D: QUALIFICATIONS

PARTNER

Nathaniel Grondin
Project Assessor

Education

University of Massachusetts Boston 2014
Bachelor of Arts (B.A.), Environmental Science

Training

OSHA 40 Hour HAZWOPER

Highlights

5 years in the environmental industry
3.5 years performing Phase I Environmental Site Assessments
One year performing Property Condition Assessments

Experience Summary

Mr. Grondin is a Staff Assessor at Partner Engineering and Science, Inc. with over three years of experience in the Environmental Due Diligence field. He has experience performing thorough site inspections of properties including gas stations, auto repair stations, historical dry cleaners, commercial and industrial properties and apartment complexes.

From November 2014 to June 2016, Mr. Grondin worked as an Environmental Specialist providing RCRA hazardous waste management services to various clients in Boston and New York City. He served as the lead onsite support specialist for New York Methodist Hospital and Stonybrook University and was responsible for maintaining all hazardous waste accumulation areas to ensure safety and compliance with applicable state and federal regulations.

In July 2016, Mr. Grondin began working on Phase I Environmental Site Assessments and has worked on over 150 assessments in ten states nationwide. His primary responsibilities have included coordinating site inspections, conducting local, state, and federal research, building site figures using Turbo Cad, collecting soil, groundwater, radon, and sub slab soil vapor samples, and preparing technical reports. He also has one year of experience completing Property Conditions Assessments for industrial and commercial properties in Southern California.

Project Experience

Site Mitigation Plan/Dust Control Plan Oversight, San Francisco, *CA.* Served as the lead environmental consultant on a mixed-use commercial/residential redevelopment project in the Potrero neighborhood of San Francisco. His responsibilities included air monitoring, implementing dust control procedures, maintaining daily site logs, logging shipping manifests and ensuring the subcontractors abided by health and safety procedures laid out in the Site Mitigation Plan.

Sub Slab Soil Vapor Sampling, Culver City, *CA.* Organized and oversaw the drilling and sampling of sub-slab soil vapor probes at a commercial property in Culver City.

5900 Wilshire Boulevard, Los Angeles, *CA.* Phase I ESA of a 31-floor office building located within a methane hazard zone.

MAACO Auto Paint and Collision Repair, Various. Completed Phase I ESAs and Limited Compliance Reviews for MAACO locations in California, Arizona, and Nevada.

Speaking

Environmental Scientist, Triumvirate Environmental Inc, *Stonybrook University.* Mr. Grondin gave a 45-minute lecture to senior-level undergraduate students regarding hazardous waste characterization, the regulatory framework of the hazardous waste industry, and the hazardous waste determination process.

Contact

ngrondin@partneresi.com

Education

M.S., Systems Science; B.S., Environmental Studies; B.S., Marine Biology, Fairleigh Dickinson University

Registrations

Certified Recycling Professional, Rutgers University (expired)
Sustainable Resource Management Professional, Rutgers University (expired)
Wetlands Delineator, Rutgers University

Training

OSHA 40-Hour Hazardous Waste Operations & Emergency Responder (HAZWOPER)
AHERA Building Inspector

Highlights

5 years completing Phase I Environmental Site Assessments (ESAs) and related due diligence projects
5 years conducting subsurface activities including site remediation, Phase II, and geotechnical investigations
5 years providing regulatory compliance assistance for Underground Storage Tanks (USTs), stormwater, Spill Prevention Control and Countermeasures (SPCC), solid and hazardous waste, and recycling
1 year monitoring construction progress as part of fund control responsibilities
9 years performing watershed education, environmental advocacy, and government partnerships

Experience Summary

Mr. Eudell currently holds the title of Project Scientist with responsibilities including the practice of thorough site assessments and technical report writing in line with the American Society of Testing and Materials (ASTM) standards and US Environmental Protection Agency's All Appropriate Inquiry (AAI) requirements, as well as customized client formats. To date, Mr. Eudell has completed over 550 assessments.

Mr. Eudell also assists the Geotechnical and Subsurface Investigation disciplines with logistical and technical field services, conducts Construction Progress Monitoring (CPM) for fund control purposes, and consults on projects that require knowledge of SPCC Plans, environmental regulatory or permit compliance, and Geographic Information Systems (GIS).

Mr. Eudell formerly supported the Site Mitigation and Phase II Site Investigation teams with the monitoring and remediation of contaminated soil, groundwater and soil vapor from a variety of sites throughout the Mid-Atlantic region, including large colleges, hospitals and landfills. Mr. Eudell has extensive experience with low-flow purging techniques and managed the Quality Assurance and NJ Laboratory Accreditation program to maintain the operations. In addition to the field work and reporting, Mr. Eudell provided GIS and other analytical services to perform sensitive human and environmental receptor evaluations, groundwater flow and cross section diagrams and related analyses.

As part of the former Environmental Regulatory Compliance and Permitting group, Mr. Eudell was also responsible for providing consulting services to municipal, county, and state agencies, utility authorities, and other public and private clientele. These services spanned a wide array of regulatory programs and required comprehensive knowledge of NJPDES and stormwater permitting, underground storage tank

identification, maintenance and compliance requirements, air emission limits and reporting requirements, solid waste issues and recycling enhancement, and hazardous waste identification and training.

Mr. Eudell previously spent nine years as an environmental advocate and educator in northeast New Jersey, where, in cooperation with local, state, and federal governments and agencies helped local stakeholders, non-profit organizations, and academic and scientific institutions secure the preservation and restoration of wetlands, watersheds, and wildlife habitat.

Mr. Eudell has presented hundreds of presentations to schools, organizations, government bodies and the general public, and was a guest lecturer at Fairleigh Dickinson University for ten years.

Project Experience

Environmental Site Assessments, Multiple Property Types, Nationally. Mr. Eudell has performed hundreds of due diligence assessments (Phase I ESAs, Transaction Screens and Environmental Database Reviews) for a variety of property types including multi-family residences, commercial office buildings, retail shopping centers, dry-cleaners, colleges, manufacturing plants, machine shops, auto repair facilities, gasoline service stations and distribution facilities.

Subsurface Investigations, Multiple Property Types, San Diego. Mr. Eudell has conducted both geotechnical and environmental sampling for a variety of existing and proposed property types including multi-family residences, commercial buildings, retail shopping centers, hospitals, and potentially contaminated sites.

Construction Progress Monitoring, Multiple Property Types, San Diego. Mr. Eudell has monitored construction progress for both ground-up builds and renovations, including office buildings in Encinitas, multi-family residences in Oceanside and San Diego, and a mixed-use building in San Diego.

Site Mitigation, Multiple Sites*, NJ, NY and PA.* Mr. Eudell has assisted with over 50 remediation projects, including Preliminary Assessments, Receptor Evaluations, and ongoing soil, soil vapor and groundwater monitoring. For example, Mr. Eudell has assisted with identification and delineation of unauthorized releases from USTs, dry cleaners, and other on- and off-site sources at a restaurant in Clayton, NJ, a car dealership in Edison, NJ an amusement park in Freehold, NJ, a hospital in Wayne, NJ, colleges in Hoboken, NJ, and Jersey City, NJ, a dry cleaner in Whitehouse, PA and numerous industrial sites and landfills.

Regulatory Compliance/Risk Management, NJ Municipal Environmental Risk Management Fund, 370 Entities, NJ. Mr. Eudell helped coordinate environmental Loss Control/Loss Prevention Programs for over 370 municipal and utility authority members of the New Jersey Environmental Risk Management Fund (EJIF). Major responsibilities included conducting environmental audits of publically-owned properties to evaluate both applicability and compliance with various regulations (USTs, SPCC, stormwater, air emissions, solid waste/recycling, etc.), and providing assistance and resources during and after environmental emergencies.

USEPA Spill Prevention, Control and Countermeasure Plan (SPCC), Multiple Clients, Nationally. Mr. Eudell has worked with multiple health care systems (Meridian Health Village, Jackson, NJ and Trinitas Medical Center, Elizabeth, NJ) and dozens of municipalities and businesses to evaluate oil storage facilities and procedures, and implement plans to achieve at least minimal compliance with the SPCC Rule.

Solid Waste and Recycling, Multiple Clients, NJ. Mr. Eudell has worked with Union County, the Essex County Utilities Authority, and dozens of municipalities to enhance municipal solid waste (MSW) recycling rates by developing new programs and providing assistance to municipal recycling coordinators. Responsibilities have included: communicating with regulatory agencies and representing clients and their interests at meetings and seminars; preparing updates to Solid Waste Management Plans; auditing solid waste collection programs and generating budget analyses; permitting Class A (MSW), Class B (bulky debris), and Class C (compost) facilities; providing oversight and analysis for household hazardous waste collection events; auditing commercial buildings and multi-family dwellings to assess recycling compliance; reviewing ordinances and tonnage reports; and grant writing and implementation.

NJPDES/Municipal Stormwater Regulation Program, Multiple Clients, NJ. Mr. Eudell has provided stormwater planning, permitting, and compliance services, including the development and implementation of Stormwater Pollution Prevention Plans (SPPP) for such clients as Freehold Cartage, Inc. (Freehold, NJ), Linden Landfill (Linden, NJ) and Bayshore Recycling Corporation (Keasbey, NJ) as well as Monmouth County and the municipalities of Belmar, East Hanover, Emerson, North Plainfield, Ramsey, Secaucus. Services have included desk audits, stormwater mapping and pipe/discharge evaluations; stormwater discharge sampling; trainings/presentations to officials and public audiences; development of educational and outreach programs and materials; review of ordinances; and completion of annual reports.

Affiliations

Association of New Jersey Recycling Professionals (ANJR)
New Jersey WasteWise Business Network

Speaking

Seven Generations, "The Human Environment," Fairleigh Dickinson University, Hackensack, NJ (2005-2015). Discussed the contextual history of the environmental movement over the previous 2500 years; the interaction, influences and costs of modern life on our environmental and the connection between our choices and our future.

Regulatory Training, NJ Municipal Environmental Risk Management Fund Training Seminars, Multiple Venues, NJ (2006, 2007, 2009, 2010, 2011, 2012). Discussed the many Federal and State regulatory programs that affect the operations, equipment and personnel of municipal and utility authority entities. Problems, solutions and discussion were provided.

Developing and Implementing a New Monitoring Program, NJDEP Volunteer Monitoring Summit, Edison, NJ (2004). Detailed the basis and pitfalls of establishing a volunteer water monitoring program and the interconnectivity of the many pieces of the puzzle, including funding, materials, volunteers, logistics, data quality, etc.

Contact

jeudell@partneresi.com

Lyly Churchill, MA
Senior Project Manager

Education

M.A. Environmental Studies, Brown University
B.S. Biology, University of California, Los Angeles, Emphasis in Ecology, Behavior and Evolution

Registrations

EPA Accredited Asbestos Inspector
National Registry of Environmental Professionals: Registered Environmental Property Assessor (REPA)

Training

California Underground Storage Tank Inspector

Highlights

15 years in environmental service industry
14 years performing Phase I Environmental Site Assessments (ESAs), Environmental Transaction Screens, radon screening, asbestos inspections, and lead-based paint inspection
13 years of experience with multi-family properties, commercial properties, retail shopping centers, municipal and private airports, oil well properties, oil refineries, gas stations, dry cleaners, aerospace manufacturers, dry cleaning plants, hotels, auto dealership and repair facilities, and various manufacturing operations throughout the US
8 years of project management experience in Environmental Assessments, Property Condition Assessments, Physical Needs Assessments, seismic evaluations, and ALTA Surveys, compliance reports
5 years of project management experience in ESAs and PCAs for properties located in Mexico, Canada, the Caribbean, Southeast Asia and South Pacific

Experience Summary

Ms. Churchill has served as an environmental scientist, project manager, senior author, or client manager for projects associated with thousands of real estate transactions. Ms. Churchill is familiar with the due diligence requirements of a varied number of reporting standards, including ASTM, EPA's All Appropriate Inquiry (AAI), Freddie Mac, Fannie Mae DUS, and U.S. Small Business Administration's (SBA) SOP 50 10. She also has experience with fulfilling numerous customized client scopes of work. Furthermore, Ms. Churchill has working experience in performing biological and noise assessments, and in preparing and reviewing environmental documentation in support of CEPA and NEPA.

While in graduate school, Ms. Churchill's Masters Thesis research focused on evaluating the potential of Japanese Knotweed (an invasive plant species) as an effective phytoremediator of heavy metal contaminated soils along a historically polluted river in Rhode Island. Phytoremediation refers to the natural ability of certain plants called hyperaccumulators to bioaccumulate contaminants in soil. Hyperaccumulators can be grown and harvested economically, leaving the soil with a greatly reduced level of toxic contamination. This cost-effective approach to remediation has gained increasing popularity in both academic and practical circles.

Ms. Churchill previously worked for the City of El Segundo, where she regularly collaborated with other local CUPAs to ensure compliance with State and Federal regulations. Ms. Churchill's responsibilities included implementing and enforcing elements of the CUPA program including the following: hazardous waste generator program; underground storage tank program; Hazardous Material Release Response Plan

(Business Plan) Program and the California Accidental Release Response Plan (CalARP) Programs. Ms. Churchill also worked on enforcing city specific environmental programs such as Stormwater Pollution Prevention and Industrial Wastewater Discharge. As the Principal Environmental Specialist for the City, Ms. Churchill worked with large industries such as Chevron, Northrop Grumman, Boeing and International Rectifier to ensure regulatory compliance pertaining to business operations and remedial activities.

Project Experience

International Airport Portfolio. Project Manager and Senior Reviewer for Phase I ESAs and PCAs of a confidential acquisition of airport facilities throughout the South Pacific and Southeast Asia. The project involved working with many foreign agencies and coordinating dual scope site visits at all facilities within a 2-week time frame.

West Coast Gas Station Portfolio. Project Manager for limited PCAs of an acquisition of gas station/car wash facilities throughout California, Oregon and Washington.

Mexico Industrial Site Portfolio. Project Manager and Senior Reviewer for Phase I ESAs of an acquisition of industrial/warehouse facilities throughout Northern Mexico. The project involved coordinating site inspections of multiple industrial facilities with private security in high risk danger areas.

Office Tower Portfolio, Los Angeles. Project Manager and Senior Reviewer for Phase I ESAs of a $1.34 Billion acquisition of Class A office buildings in Los Angeles.

Freddie Mac Multi-Scope Portfolio. Project Manager and Senior Reviewer for Phase I ESAs, PCAs and PMLs of an acquisition of multifamily apartment complexes throughout Southern California. The project involved coordinating three different scopes of specially qualified assessors to conduct site visits with radon and ACM sampling.

Contact

lchurchill@partneresi.com

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Appendix J-2

Limited Site Assessment

PARTNER
Engineering and Science, Inc.

May 26, 2023

Mr. Eric Benson
Pacific Steel Group
4805 Murphy Canyon Road
San Diego, California 92123

Subject: Limited Site Assessment
860 Sopp Road
Mojave, California 92123
Partner Project No. 23-408667.1

Dear Mr. Benson:

Partner Engineering and Science, Inc. (Partner) is pleased to provide the results of a limited site assessment of the abovementioned address (the "subject property"). Per the scope of work, Partner performed a visual site reconnaissance of the subject property to document current conditions, and address observations made during Partner's 2020 Phase I Environmental Site Assessment (PHI) report. Below is a summary of our findings:

Background

The site visit for the Phase I (Partner Project No. 20-299997.1) was performed on the subject property identified by the Assessor's Parcel Numbers (APNs): 431-010-02 (Parcel A) and 431-030-02 (Parcel B) on November 20, 2020. No evidence of recognized environmental conditions or environmental issues were identified in connection with the subject property. However, a small section on the northern portion of the subject property was utilized for vehicle storage and livestock holding. Onsite operations were limited to seasonal agricultural use. An irrigation well was present on the northern portion of the property. Photographs included with the report showed plant nursery use, material storage including recreational vehicles, storage containers/structures, wood, empty aboveground water storage tanks, auto parts, roofing material and a 55-gallon drum on a pallet.

Limited Site Assessment

On May 25, 2023, Partner accessed the subject property to document current physical conditions. Partner observed the subject property to be vacant land at the time of the site reconnaissance with areas of native and non-native type vegetation. Fencing on the subject property included an enclosed area on the northern portion with an apparent not in use irrigation well and poly vinyl chloride irrigation lines. Minor amounts of solid waste debris including plastic, concrete masonry unit blocks, concrete and rock planters, a tire, roofing material, metal and glass were observed onsite. No structures, storage tanks/drums or hazardous material was observed during the site reconnaissance. Refer to photolog attachment for photographs of observed items.

All reports, both verbal and written, are for the sole use and benefit of Pacific Steel Group. This letter has no other purpose and may not be relied upon by any other person or entity without the written consent of Partner. Please feel free to contact me with any questions or concerns at (310) 765-7271.

Sincerely,



Lyly Churchill, MA
Principal

Attachment
Site Photographs

PARTNER



1. View of subject property facing south from Sopp Road.



2. View of typical graded area on subject property.



3. View of fence enclosed area on subject property.



4. View of concrete and rock planter on subject property.



5. View of poly vinyl chloride irrigation line and fencing on subject property.



6. View of poly vinyl chloride irrigation line on subject property.



7. View of well on subject property.



8. Close up view of well on subject property.



9. View of concrete masonry unit blocks and metal debris on subject property.



10. View of typical vegetation on subject property.



11. View of typical graded area and typical vegetation on subject property.



12. View of typical graded area and typical vegetation on subject property.



13. View of typical native and non-native type vegetation on the subject property.



14. View of roofing material debris on the subject property.



15. View of subject property south portion facing west from an unpaved road, 10th Street Southwest.



16. View of subject property south portion facing east and adjoining railroad tracks from Sierra Highway.