**Lorelei H. Oviatt, AICP, Director**
2700 "M" Street, Suite 100
Bakersfield, CA 93301-2323
Phone: (661) 862-8600
Fax: (661) 862-8601 TTY Relay 1-800-735-2929
Email: planning@kerncounty.com
Web Address: http://kernplanning.com/

**PLANNING AND NATURAL RESOURCES DEPARTMENT**

**Planning**
**Community Development**
**Administrative Operations**

# NOTICE OF PREPARATION

**DATE:** October 31, 2019

**TO:** See Attached Mailing List

**FROM:** Kern County Planning and Natural Resources Department
Attn: Ronelle Candia
2700 "M" Street, Suite 100
Bakersfield, CA 93301
(661) 862-8997
candiar@kerncounty.com

**SUBJECT: NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT**

The Kern County Planning and Natural Resources Department as Lead Agency pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15052 has required that an Environmental Impact Report (EIR) pursuant to CEQA Guidelines Section 15161 be prepared for the project identified below. The Planning and Natural Resources Department solicits the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval of projects.

Due to the limits mandated by State law, your response must be received by **December 2, 2019 at 5:00 p.m.** In addition, comments can be submitted at a **scoping meeting** that will be held at the Kern County Planning and Natural Resources Department on **November 22, 2019 at 1:30 p.m.** at the address shown above.

**PROJECT TITLE:** Lost Hills Composting and Waste to Energy Project by Lost Hills Environmental LLC. Modification No. 2, CUP No. 9, Map 28; Modification No. 1, CUP No. 1, Map 28; and issuance of new CUP 13, Map 28 (PP18111).

**PROJECT LOCATION:** The project site is located at the east and west side of Holloway Road, approximately 2 miles north of Highway 46, at the GP Road junction, and approximately 3.5 miles northwest of the unincorporated community of Lost Hills, in central Kern County on Assessor's Parcel Numbers (APNs) 057-220-16; & 057-240-29,50 & 60. The site is located in Section(s) 24 and 25 of Township 26 South, Range 20 East and Section 30 of Township 26 South, Range 21 East of the Mount Diablo Base and Meridian (MDB&M.)

**PROJECT DESCRIPTION:** The project includes a request for land use entitlements necessary to facilitate the expanded and continued use of a Class III Non-Hazardous Industrial Waste Landfill facility and the establishment of a new Waste to Energy Biomass Gasification Facility. Implementation of the proposed project will require the following:

a) **Mod. No. 1, Conditional Use Permit (CUP) No. 1, Map 28**
Amendment to the boundaries of the CUP No.1, Map 28 of the existing mining facility to remove six (6) acres of the project site, which will become the location for the proposed Waste to Energy Biomass Gasification Facility.

b) **Issuance of CUP No. 13, Map 28**
Establishment of a new CUP that would facilitate the construction of a 3-megawatt (MW) [net] Waste-to-Energy biomass gasification facility.

c) **Mod No. 2, CUP No. 9, Map 28**
Amendment to CUP No. 9, Map 28 of the existing Class III Non-Hazardous Industrial Waste Landfill to include:

- a revision in the allowable waste streams permitted at the landfill to allow the acceptance and disposal of various materials, with a maximum of 1,000 tons per day of organic material;
- a revision to allow for an increase in permitted hours of operation, tonnage, and traffic volume; and
- a new 640,000 ton per year (tpy) extended aerated static Pile (eASP) composting facility sited on 136.2 acres within the current landfill permitted facility boundary. Material accepted for composting at the facility would include up to 320,000 tpy of biosolids, green waste, food waste, and manure, and up to 320,000 tpy of wood waste, for a total 640,000 tpy.

**Site Access:** The project site is accessible via Holloway Road. No new site access is proposed.

**Water:** Water for the project is proposed to be provided by Berrenda Mesa Water District through an agreement with Blackwell Land Co, and an on-site drainage and rainwater collection sump.

**Sewer:** The project site is currently served by an on-site wastewater disposal system. The project would either provide additional wastewater disposal facilities (i.e., septic systems) or portable bathroom facilities to accommodate use by employees located at the bioenergy facility.

**Document can be viewed online at:** https://kernplanning.com/planning/notices-of-preparation/

Signature: 

Name: Ronelle Candia, Supervising Planner
Planning and Natural Resources Department
By: Cindi L. Hoover, Planner II

CUP 9, Mod 2, CUP 1, CUP 13 Map 28
Lost Hills Enviro Compost & Waste to Energy
es (10/21/2019)
I:\Planning\WORKGRPS\WP\LABELS\28cup9mod2cup1cup13_EIR_Cindi.docx

# EIR Mailing Labels

City of Arvin
P.O. Box 548
Arvin, CA 93203

Bakersfield City Planning Dept
1715 Chester Avenue
Bakersfield, CA 93301

Bakersfield City Public Works Dept
1501 Truxtun Avenue
Bakersfield, CA 93301

California City Planning Dept
21000 Hacienda Blvd.
California City, CA 93515

Delano City Planning Dept
P.O. Box 3010
Delano, CA 93216

City of Maricopa
P.O. Box 548
Maricopa, CA 93252

City of McFarland
401 West Kern Avenue
McFarland, CA 93250

City of Ridgecrest
100 West California Avenue
Ridgecrest, CA 93555

City of Shafter
336 Pacific Avenue
Shafter, CA 93263

City of Taft
Planning & Building
209 East Kern Street
Taft, CA 93268

City of Tehachapi
Attn: John Schlosser
115 South Robinson Street
Tehachapi, CA 93561-1722

City of Wasco
764 E Street
Wasco, CA 93280

Inyo County Planning Dept
P.O. Drawer "L"
Independence, CA 93526

Kings County Planning Agency
1400 West Lacey Blvd, Bldg 6
Hanford, CA 93230

Los Angeles Co Reg Planning Dept
320 West Temple Street
Los Angeles, CA 90012

San Bernardino Co Planning Dept
385 North Arrowhead Avenue, 1st Floor
San Bernardino, CA 92415-0182

San Luis Obispo Co Planning Dept
Planning and Building
976 Osos Street
San Luis Obispo, CA 93408

Santa Barbara Co Resource Mgt Dept
123 East Anapamu Street
Santa Barbara, CA 93101

Tulare County Planning & Dev Dept
5961 South Mooney Boulevard
Visalia, CA 93291

Ventura County RMA Planning Div
800 South Victoria Avenue, L1740
Ventura, CA 93009-1740

U.S. Bureau of Land Management
Caliente/Bakersfield
3801 Pegasus Drive
Bakersfield, CA 93308-6837

U. S. Fish & Wildlife Service
Division of Ecological Services
2800 Cottage Way #W-2605
Sacramento, CA 95825-1846

North West Kern Resource Cons Dist
5080 California Avenue, Suite 150
Bakersfield, CA 93309

Environmental Protection Agency
Region IX Office
75 Hawthorn Street
San Francisco, CA 94105

U.S. Dept of Agriculture/NRCS
5080 California Avenue, Ste 150
Bakersfield, CA 93309-0711

State Air Resources Board
Stationary Resource Division
P.O. Box 2815
Sacramento, CA 95812

So. San Joaquin Valley Arch Info Ctr
California State University of Bkfd
9001 Stockdale Highway
Bakersfield, CA 93311

Caltrans/Dist 6
Planning/Land Bank Bldg.
P.O. Box 12616
Fresno, CA 93778

State Clearinghouse
Office of Planning and Research
1400 - 10th Street, Room 222
Sacramento, CA 95814

State Dept of Conservation
Director's Office
801 "K" Street, MS 24-01
Sacramento, CA 95814-3528

State Dept of Conservation
Division of Oil & Gas
4800 Stockdale Highway, Ste 108
Bakersfield, CA 93309

State Dept of Conservation
Div Recycling Cert. Sec.
801 "K" Street, MS 19-01
Sacramento, CA 95814

California State University
Bakersfield - Library
9001 Stockdale Highway
Bakersfield, CA 93309

California Energy Commission
James W. Reed, Jr.
1516 Ninth Street
Mail Stop 17
Sacramento, CA 95814

California Fish & Wildlife
1234 East Shaw Avenue
Fresno, CA 93710

State Dept of Food & Agriculture
1220 "N" Street
Sacramento, CA 95814

California Highway Patrol
Planning & Analysis Division
P.O. Box 942898
Sacramento, CA 94298-0001

Integrated Waste Management
P.O. Box 4025, MS #15
Sacramento, CA 95812-4025

State Water Resources Control Board
Division of Drinking Water
Attn: Jesse Dhaliwal, Sr. Sanitary Eng
4925 Commerce Drive, Suite 120
Bakersfield, CA 93309

Public Utilities Comm Energy Div
505 Van Ness Avenue
San Francisco, CA 94102

California Regional Water Quality
Control Board/Central Valley Region
1685 E Street
Fresno, CA 93706-2020

CalRecycle
Dept of Resources, Recycling, and Recovery
1001 "I" Street
Sacramento, CA 95812

Kern County
Agriculture Department

Kern County Administrative Officer

Kern County Public Works Department/
Building & Development/Floodplain

Kern County Public Works Department/
Building & Development/Survey

Kern County
Env Health Services Department

Kern County Fire Dept
David Witt, Fire Chief

Kern County Fire Dept
Cary Wright, Fire Marshall

Kern County Library/Beale
Local History Room

Kern County Library/Beale
Andie Sullivan

Kern County Library
Wasco Branch
1102 Seventh Street
Wasco. CA 93280

Kern County Sheriff's Dept
Administration

Kern County Public Works Department/
Building & Development/Development Review

Kern County Public Works Department/Operations &
Maintenance/Regulatory Monitoring & Reporting

Lost Hills Union School Dist
P.O. Box 158
Lost Hills, CA 93249

Wasco Union High School Dist
P.O. Box 250
Wasco, CA 93280

Kern County Superintendent of Schools
Attention Mary Baker
1300 17th Street
Bakersfield, CA 93301

KernCOG
1401 19th Street - Suite 300
Bakersfield, CA 93301

Lost Hills Water Dist
3008 Sillect Avenue, Ste 205
Bakersfield, CA 93308-6340

Kern County Water Agency
P.O. Box 58
Bakersfield, CA 93302-0058

San Joaquin Valley
Air Pollution Control District
1990 East Gettysburg Avenue
Fresno, CA 93726

West Side Mosquito
Abatement Dist.
P.O. Box 205
Taft, CA 93268

Adams, Broadwell, Joseph & Cardozo
Attention: Janet M. Laurain
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080

U.S. Air Force
Attn: David Bell/AFCEC CZPW
Western Regional/Leg Branch
510 Hickam Avenue, Bld 250-A
Travis AFD, CA 94535-2729

U.S. Army
Attn: Philip Crosbie, Chief
Strategic Plans, S3, NTC
P.O. Box 10172
Fort Irwin, CA 92310

U.S. Army
Attn: Tim Kilgannon, Region 9 Coordinator
Office of Strategic Integration
721 - 19th Street, Room 427
Denver, CO 80202

U.S. Navy
Attn: Steve Chung
Regional Community Plans & Liaison Officer
1220 Pacific Highway
San Diego, CA 92132-5190

U.S. Marine Corps
Commanding General
MCIWEST-MCB CamPen
Attn: A/CS, G7
Box 555010
Camp Pendleton, CA 92055-5246

Los Angeles Audubon
926 Citrus Avenue
Los Angeles, CA 90036-4929

Center on Race, Poverty
& the Environment
Attn: Marissa Alexander
1999 Harrison Street – Suite 650
San Francisco, CA 94612

Center on Race, Poverty
& the Environmental/
CA Rural Legal Assistance Foundation
1012 Jefferson Street
Delano, CA 93215

Defenders of Wildlife/
Kim Delfino, California Dir
980 - 9th Street, Suite 1730
Sacramento, CA 95814

Native American Heritage Council
of Kern County
Attn: Gene Albitre
3401 Aslin Street
Bakersfield, CA 93312

Pacific Gas & Electric Co
Land Projects
650 "O" Street, First Floor
Fresno, CA 93760-0001

Sierra Club/Kern Kaweah Chapter
P.O. Box 3357
Bakersfield, CA 93385

Southern California Edison
2244 Walnut Grove, Ave, GO-1 Quad 2C
Rosemead, CA 91770

Verizon California, Inc.
Attention Engineering Department
520 South China Lake Boulevard
Ridgecrest, CA 93555

Chumash Council of Bakersfield
2421 "O" Street
Bakersfield, CA 93301-2441

David Laughing Horse Robinson
P.O. Box 20849
Bakersfield, CA 93390

Kern Valley Indian Council
Attn: Robert Robinson, Chairperson
P.O. Box 401
Weldon, CA 93283

Kern Valley Indian Council
Historic Preservation Office
P.O. Box 401
Weldon, CA 93283

Santa Rosa Rancheria
Ruben Barrios, Chairperson
P.O. Box 8
Lemoore, CA 93245

Tejon Indian Tribe
Kathy Morgan, Chairperson
1731 Hasti-acres Drive, Suite 108
Bakersfield, CA 93309

Kitanemuk & Yowlumne Tejon Indians
Chairperson
115 Radio Street
Bakersfield, CA 93305

Tubatulabals of Kern County
Attn: Robert Gomez, Chairperson
P.O. Box 226
Lake Isabella, CA 93240

Tule River Indian Tribe
Neal Peyron, Chairperson
P.O. Box 589
Porterville, CA 93258

San Fernando Band of Mission Indians
Attn: John Valenzuela, Chairperson
P.O. Box 221838
Newhall, CA 91322

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11512 El Camino Real, Suite 370
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Rupal Patel
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Los Angeles, CA 90036

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Sean Kiernan
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San Francisco, CA 94104

EDP Renewables Company
North America, LLC
53 SW Yamhill Street
Portland, OR 97204

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Palm Springs, CA 92263-2190

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Portland, OR 97209

Recurrent Energy
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300 California Street, 8th Floor
San Francisco, CA 92109

Kate Kelly
Kelly Group
P.O. Box 868
Winters, CA 95694

Carol Lawhon
Association Executive, IOM
Tehachapi Area Assoc of Realtors
803 Tucker Road
Tehachapi, CA 93561

LIUNA
Attn: Danny Zaragoza
2201 "H" Street
Bakersfield, CA 93301

Sierra Club/Kern Kaweah Chapter
P.O. Box 3357
Bakersfield, CA 93385

Lozeau Drury LLP
1939 Harrison Street, Suite 150
Oakland, CA 94612

Rio Bravo Water Storage District
846 Allen Road
Bakersfield, CA 93314

Berrenda Mesa Water Storage District
14823 Highway 33
Lost Hills, CA 93249

Southern California Edison
P.O. Box 410
Long Beach, CA 90801

# Notice of Completion & Environmental Document Transmittal

*Mail to:* State Clearinghouse, P. O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
*For Hand Delivery/Street Address:* 1400 Tenth Street, Sacramento, CA 95814

**SCH #** _____

**Project Title:** Lost Hills Composting and Waste to Energy Project by Lost Hills Environmental, LLC

Lead Agency: Kern County Planning Department | Contact Person: Ronelle Candia

Mailing Address: 2700 "M" Street Suite 100 | Phone: (661) 862-8997

City: Bakersfield | Zip: 93301-2323 | County: Kern

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**Project Location:** County: Kern | City/Nearest Community: Lost Hills

Cross Streets: Holloway Road & GP Road | Zip Code: 93249

Lat. / Long.: 35.64138°N / 119.76580° W | Total Acres: 337

Assessor's Parcel No.: 057-220-16; 057-240-29,50 & 60 | Section: 24; 25 | Twp.: 26S | Range: 20E | Base: MDB&M

Within 2 Miles: State Hwy #: 46 | Waterways: California Aqueduct

Airports: _____ | Railways: _____ | Schools: _____

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**Document Type:**

CEQA: ☒ NOP ☐ Early Cons ☐ Neg Dec ☐ Mit Neg Dec ☐ Draft EIR ☐ Supplement/Subsequent EIR (Prior SCH No.) _____ Other _____

NEPA: ☐ NOI ☐ EA ☐ Draft EIS ☐ FONSI

Other: ☐ Joint Document ☐ Final Document ☐ Other _____

---

**Local Action Type:**

☐ General Plan Update ☐ General Plan Amendment ☐ General Plan Element ☐ Community Plan
☐ Specific Plan ☐ Master Plan ☐ Planned Unit Development ☐ Site Plan
☐ Rezone ☐ Prezone ☒ Use Permit ☐ Land Division (Subdivision, etc.)
☐ Annexation ☐ Redevelopment ☐ Coastal Permit ☐ Other _____

---

**Development Type:**

☐ Residential: Units _____ Acres _____
☐ Office: Sq.ft. _____ Acres _____ Employees _____
☐ Commercial: Sq.ft. _____ Acres _____ Employees _____
☐ Industrial: Sq.ft. _____ Acres _____ Employees _____
☐ Educational _____
☐ Recreational _____

☐ Water Facilities: Type _____ MGD _____
☐ Transportation: Type _____
☐ Mining: Mineral _____
☒ Power: Type Bioenergy MW 3
☐ Waste Treatment: Type _____ MGD _____
☐ Hazardous Waste: Type _____
☒ Other: Non-Hazardous Waste Disposal & Composting

---

**Project Issues Discussed in Document:**

☒ Aesthetic/Visual
☐ Agricultural Land
☒ Air Quality
☒ Archeological/Historical
☒ Biological Resources
☐ Coastal Zone
☒ Drainage/Absorption
☐ Economic/Jobs
☐ Fiscal
☒ Flood Plain/Flooding
☒ Forest Land/Fire Hazard
☒ Geologic/Seismic
☒ Minerals
☒ Noise
☐ Population/Housing Balance
☒ Public Services/Facilities
☐ Recreation/Parks
☐ Schools/Universities
☒ Septic Systems
☐ Sewer Capacity
☒ Soil Erosion/Compaction/Grading
☒ Solid Waste
☒ Toxic/Hazardous
☒ Traffic/Circulation
☒ Vegetation
☒ Water Quality
☒ Water Supply/Groundwater
☒ Wetland/Riparian
☒ Wildlife
☐ Growth Inducing
☒ Land Use
☒ Cumulative Effects
☐ Other _____

---

**Present Land Use/Zoning/General Plan Designation:**

Existing Class III Non-Hazardous Landfill and Surface Mining. Kern County General Plan: *3.4(Solid Waste Facilities); 3.4.1 ((Solid Waste Disposal Facility Buffer); Zoning:* A (Exclusive Agriculture).

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**Project Description:** The project includes a request for land use entitlements necessary to facilitate the continued and expanded use of an existing Class III Non-Hazardous Landfill; the future construction and operation of an extended Aeration composting facility; and the future construction and operation of a Waste-to-Energy biomass gasification facility and associated infrastructure to generate a combined 3 megawatts of renewable electrical energy on approximately 337 acres of privately-owned land. Implementation of the project as proposed would require: a) Modification No. 1 of Conditional Use Permit (CUP) No. 1, Map 28; b) Issuance of CUP No. 13, Map 28; and c) Modification No. 2 of CUP No. 9, Map 28.

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and "**X**".
If you have already sent your document to the agency please denote that with an "**S**".

| | | | |
|---|---|---|---|
| S | Air Resources Board | | Office of Emergency Services |
| | Boating & Waterways, Department of | | Office of Historic Preservation |
| S | California Highway Patrol | | Office of Public School Construction |
| | CalFire | | Parks & Recreation |
| S | Caltrans District # 6 | | Pesticide Regulation, Department of |
| | Caltrans Division of Aeronautics | S | Public Utilities Commission |
| | Caltrans Planning (Headquarters) | S | Regional WQCB # Central |
| | Central Valley Flood Protection Board | X | Resources Agency |
| | Coachella Valley Mountains Conservancy | | S.F. Bay Conservation & Development Commission |
| | Coastal Commission | | San Gabriel & Lower L.A. Rivers and Mtns Conservancy |
| | Colorado River Board | | San Joaquin River Conservancy |
| S | Conservation, Department of | | Santa Monica Mountains Conservancy |
| | Corrections, Department of | | State Lands Commission |
| | Delta Protection Commission | | SWRCB: Clean Water Grants |
| | Education, Department of | S | SWRCB: Water Quality |
| S | Energy Commission | | SWRCB: Water Rights |
| S | Fish & Game Region # Fresno | | Tahoe Regional Planning Agency |
| S | Food & Agriculture, Department of | X | Toxic Substances Control, Department of |
| | General Services, Department of | S | Water Resources, Department of |
| | Health Services, Department of | | |
| | Housing & Community Development | | Other _____ |
| S | Integrated Waste Management Board | | Other _____ |
| S | Native American Heritage Commission | | |

**Local Public Review Period (to be filled in by lead agency)**

Starting Date October 31, 2019 Ending Date December 2, 2019

**Lead Agency (Complete if applicable):**

Consulting Firm: _____ Applicant: _____
Address: _____ Address: _____
City/State/Zip: _____ City/State/Zip: _____
Contact: _____ Phone: _____
Phone: _____

**Signature of Lead Agency Representative:** /s/ **Date:** 10/31/2019

Ronelle Candia, Supervising Planner

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

# INITIAL STUDY/NOTICE OF PREPARATION

## Lost Hills Composting and Waste to Energy Project by Lost Hills Environmental LLC

Modification No. 1, Conditional Use Permit No. 1, Map 28;

Modification No. 2, Conditional Use Permit No. 9, Map 28;

Conditional Use Permit No. 13, Map 28

PLN 18-01978
(PP18111)

## LEAD AGENCY:


Kern County Planning and Natural Resources Department
2700 M Street, Suite 100
Bakersfield, California 93301-2370

*Contact: Ms. Ronelle Candia*
*(661) 862-8997*
*candiar@kerncounty.com*


**October 2019**

# Table of Contents

## LIST OF FIGURES



## LIST OF TABLES

# 1.0 PROJECT DESCRIPTION

## 1.1 PROJECT LOCATION

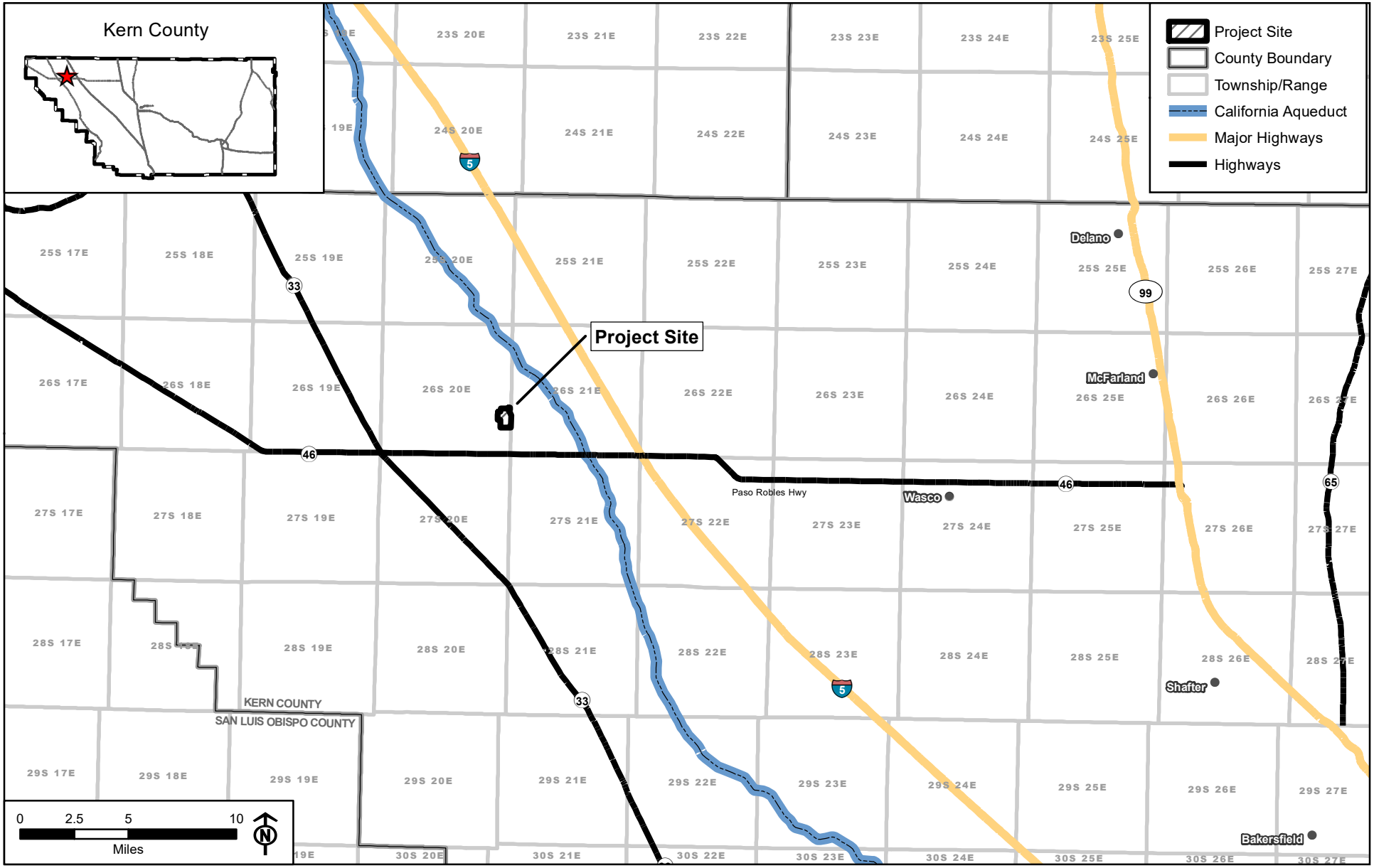
The Lost Hills Composting and Waste to Energy Project (project) site is in the unincorporated area of western Kern County, California (Figure 1, *Regional Vicinity*). The project site is bordered to the north by HM Holloway Gypsum Mine, to the south by the Kern County Landfill (inactive), to the west by undeveloped lands and fallowed agricultural lands, and to the east by Lost Hills Oil Fields. Nearby land uses include row crops, orchard crops including nut tree and citrus tree crops, petroleum production and ancillary uses, surface mining, biosolids/green waste composting operation, and two state highways. The California Aqueduct runs parallel to the project site, approximately 2 miles east. The nearest populated area to the project site is the unincorporated community of Lost Hills, approximately 3.5 miles southeast of the project.

The project is in a relatively flat section of the County, where elevation ranges from approximately 410 feet above mean sea level (amsl) to approximately 425 feet amsl and is located within the U.S. Geological Survey (USGS) 7.5-minute series, Antelope Plain, California, topographic quadrangle. The project site is located within portions of Sections 24 and 25, Township 26 South, Range 20 East, in the Mount Diablo Base and Meridian (Sec(s) 24 & 25, T31S, R28E, M. D. B. & M.).

The project site is on two adjacent sites separated by Holloway Road. The first site (Site A) is an existing class III non-hazardous industrial waste landfill facility located at 14045 Holloway Road on the west side of Holloway Road at the GP Road junction, and the second site (Site B) is an equipment staging and storage lot on the east side of Holloway Road, north of GP Road (Figure 2, *Site Vicinity*). The sites are approximately 1.5 miles and 2.25 miles, respectively, north of State Route 46. Lost Hills Environmental, LLC (the project proponent) owns and operates the project, which has been in operation since 1997, of which approximately 331 acres are currently included in the conditional use permit (CUP) No. 9, Map 28 boundary. No boundary changes are proposed to CUP No. 9, Map 28. Lost Hills Mining, LLC owns Site B and utilizes the site for equipment staging and storage for the HM Holloway Gypsum Mine. Site B is currently included in CUP No. 1, Map 28. The project proponent has requested 6 acres comprising Site B be removed from CUP No. 1, Map 28, and a new CUP be issued to allow for a waste-to-energy biomass gasification facility. The complete project site is on Assessor's Parcel Numbers (APNs) 057-220-16, 057-220-21, 057-240-29, 057-240-50, and 057-240-60.

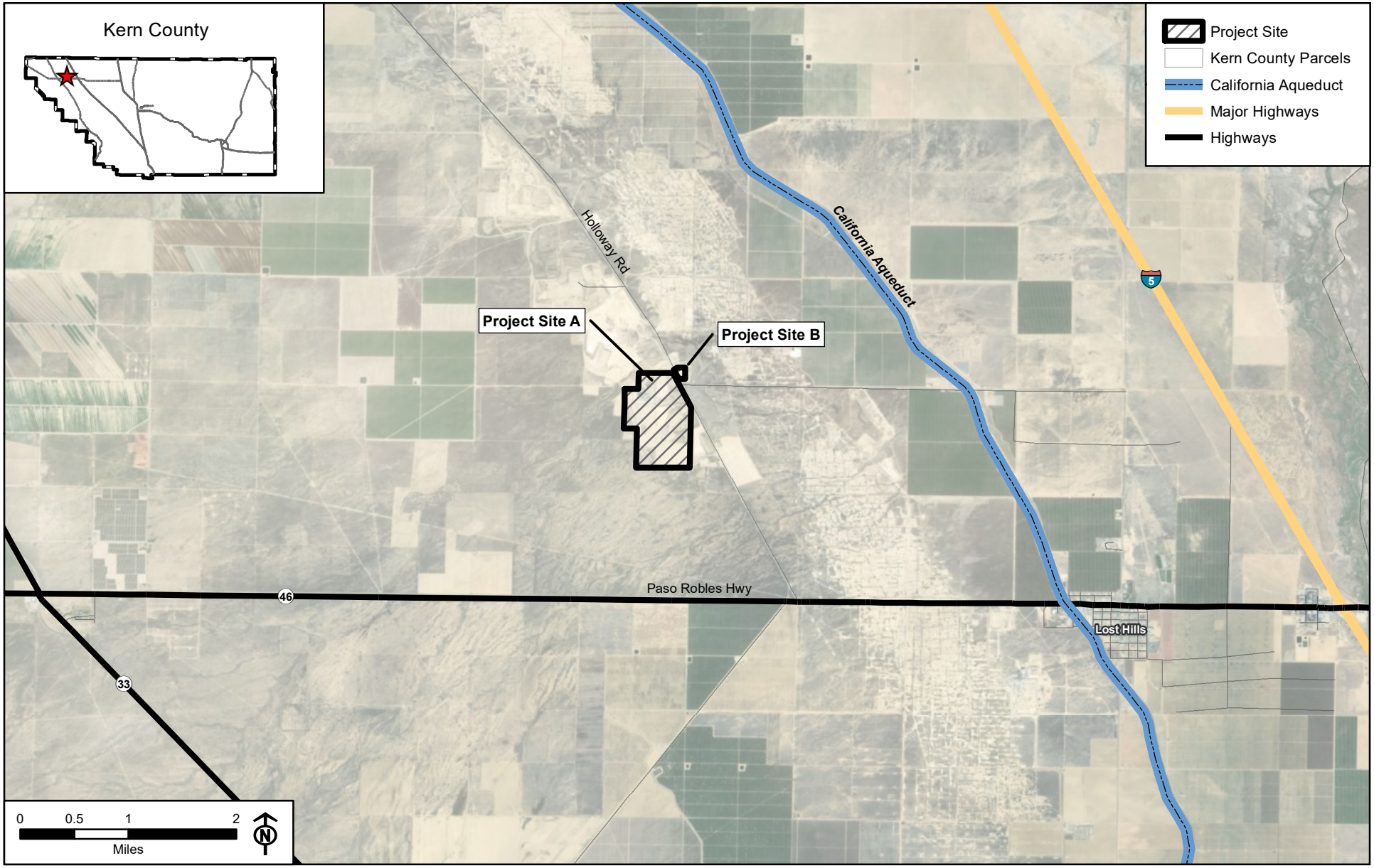
Site A has been used as a landfill facility since 1997; it was previously known as HM Holloway Inc. Landfill, and prior to that the HM Holloway Gypsum Mine. The project site is situated on 331 acres of previously mined land consisting of three separate pits known as Pit "F," Pit "G," and Pit "E," as well as a connecting pit referred to as Pit "FG," for a total disposal footprint of 193 gross acres and 176 net acres; the remaining 138 acres are utilized for ancillary activities, including, but not limited to, overburden storage, monitoring equipment, a leachate system, water storage, truck washing station, and a required buffer area around the facility. HM Holloway Inc. continues to operate a gypsum mine facility located immediately north/northwest of the project, but not included within this project.

As shown in Figure 2, *Site Vicinity*, Site A is primarily accessible from three entrance/exit points on the west side of Holloway Road, and Site B is currently accessible from access along the east side of Holloway Road. Both project sites would continue to utilize the current site accesses with the addition of directional traffic flow identifying ingress and egress for each site; no new site access is proposed.




**Mod. No. 1, CUP No. 1, Map 28; Mod. No. 2, CUP No. 9, Map 28; CUP No. 13, Map 28**

**Figure 1. Regional Vicinity**




**Mod. No. 1, CUP No. 1, Map 28; Mod. No. 2, CUP No. 9, Map 28; CUP No. 13, Map 28**

**Figure 2. Site Vicinity**

## 1.2 ENVIRONMENTAL SETTING

Land within the project vicinity is generally characterized as sparsely developed, rural, oil field and surface mining area located in western Kern County. Two State Highways (State Route [SR-] 46 and SR-33) are located 1.6 miles and 6.4 miles, respectively, from the project site. Interstate 5 (I-5) is located approximately 5 miles east of the project site. The climate in the area is semi-arid with total annual precipitation over the past 30 years averaging about 5.70 inches with a range of 1 to 14 inches. Rainfall occurs generally between the months of January and March. Occasional thunderstorms may occur in August, but do not account for much of the annual precipitation. Winter months are mild with temperatures averaging 20 degrees Fahrenheit (° F) to 50° F. Summers are harsh and dry with temperatures ranging from 60° F to over 100° F.

The project site, as currently permitted, is extensively disturbed and developed with a 331-acre landfill facility that has been in continuous operation since it was permitted via CUP in 1997 (Site A), and with staging and storage for large equipment that was permitted in 1982 for gypsum mining and reclamation, although it has been continuously used for mining operations for over 70 years (Site B). Vegetation throughout the site is primarily ruderal. Land use records indicate that, prior to development of the project site with the existing landfill facility, the entire project site was historically used for surface mining of gypsum.

The closest residences are approximately 2 miles east at Munger Farms. The unincorporated community of Lost Hills is approximately 3.5 miles to the southeast. The City of Wasco is approximately 20 miles to the east. The Cities of Delano and Shafter are 25 miles northeast and 27 miles southeast, respectively (Figure 1, *Regional Vicinity*).

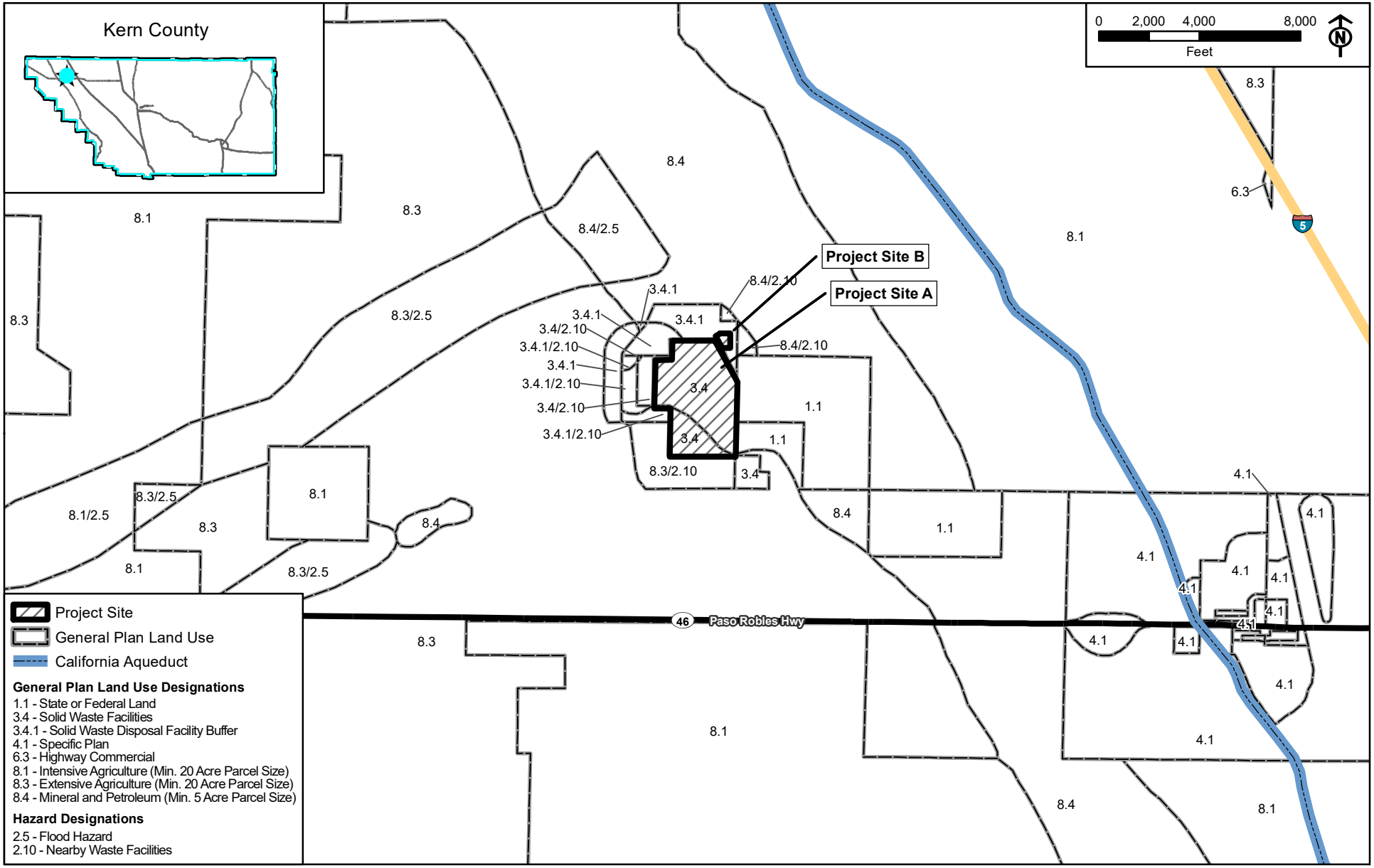
The project is not within the boundaries of any airport as identified in the Kern County Airport Land Use Compatibility Plan (ALUCP). The closest public airport is the Lost Hills Airport, approximately 4 miles to the east. The project is within the San Joaquin Valley Air Basin.

According to the California Department of Conservation Kern County Important Farmland 2016 Map, the project site is identified as Vacant or Disturbed Land on all project site APNs. No lands within the project boundary are subject to a Williamson Act Land Use contract. The project site is excluded from Kern County Agricultural Preserve No. 5.

The project lies within the boundaries of the Kern County General Plan (KCGP) (Figure 3, *Existing General Plan Designations)*. The project is also subject to the provisions of the Kern County Zoning Ordinance (Figure 4, *Existing Zoning Classifications*). The KCGP existing general plan designations and zoning classifications for the site and surrounding land uses are listed below in Table 1, *Project Site and Surrounding Land Uses*.

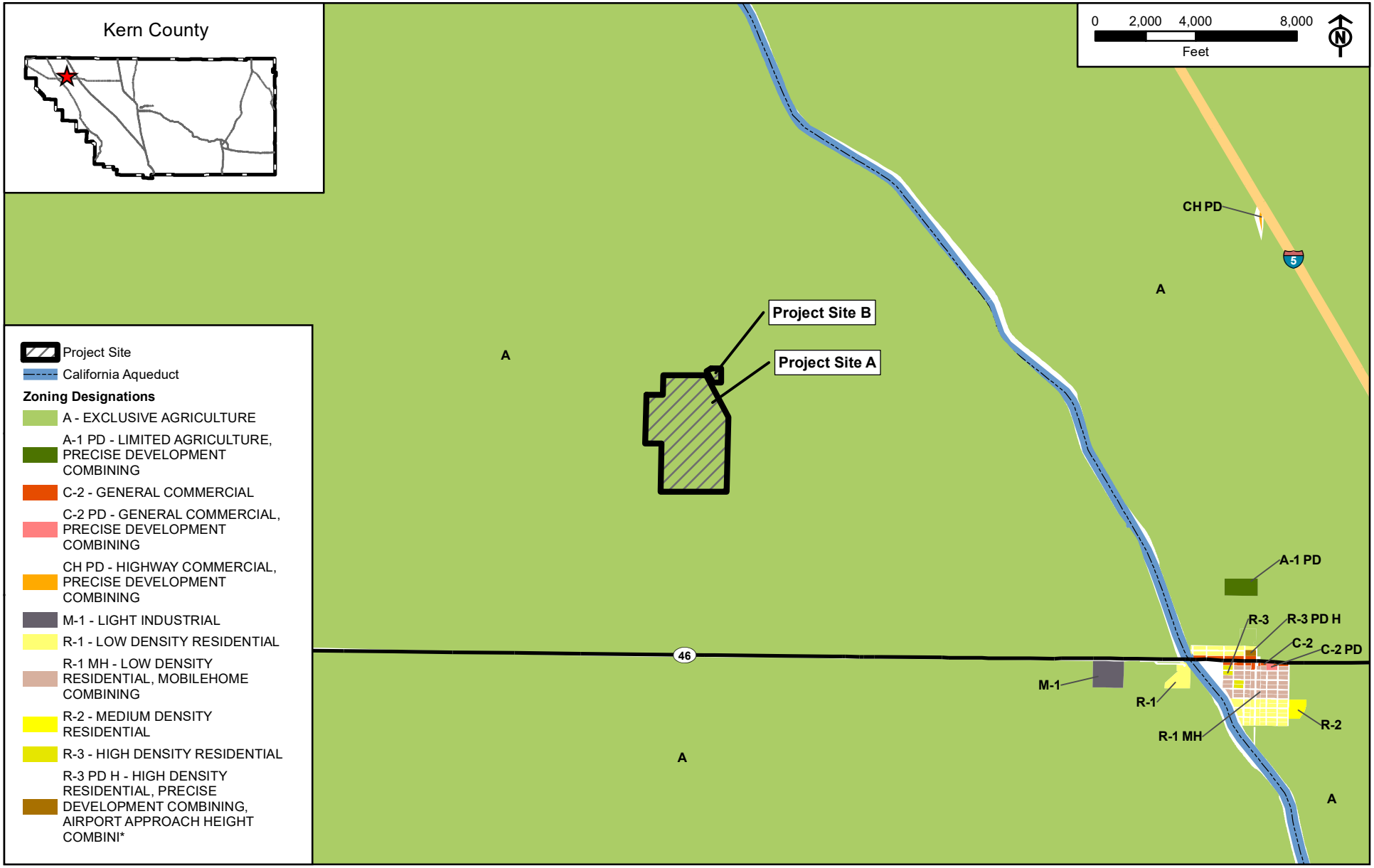
### 1.2.1 Surrounding Land Uses

Surrounding land uses include the HM Holloway Gypsum Mine to the north, undeveloped Federal land and the Lost Hills Oil Field (owned and operated by various producers) to the east (approximately 3,300 acres), a closed Kern County (County) landfill and other undeveloped land to the south, and undeveloped land to the west. Other adjacent or nearby land uses include orchard and row-crop farming, a biosolids/green waste composting operation (Liberty Composting), and two State Highways (SR-46 and SR-33). The California Aqueduct is the nearest major waterway, located approximately 2.13 miles to the east.




**Mod. No. 1, CUP No. 1, Map 28; Mod. No. 2, CUP No. 9, Map 28; CUP No. 13, Map 28**

**Figure 3. Existing General Plan Land Use Designations**




**Mod. No. 1, CUP No. 1, Map 28; Mod. No. 2, CUP No. 9, Map 28; CUP No. 13, Map 28**

**Figure 4. Existing Zoning**

**Table 1: Project Site and Surrounding Land Uses**

| | Existing Land Use | Existing Map Code Designation | Existing Zoning Classifications |
|---|---|---|---|
| Site A | Developed with Landfill Facility | 3.4 (Solid Waste Disposal Facility) | A (Exclusive Agriculture) |
| Site B | HM Holloway Equipment Yard | 3.4.1 (Solid Waste Disposal Facility Buffer) | A (Exclusive Agriculture) |
| North | HM Holloway Gypsum Mine | 3.4.1 (Solid Waste Disposal Facility Buffer)<br>8.4/2.10 (Mineral and Petroleum (5-acre min.)/Nearby Solid Waste Disposal Facility) | A (Exclusive Agriculture) |
| South | Undeveloped; Inactive Kern County Landfill | 8.3 (Extensive Agriculture, 20-acre min)<br>8.3/2.10 (Extensive Ag, 20-acre min)/Nearby Solid Waste Disposal Facility)<br>3.4 (Solid Waste Disposal Facility) | A (Exclusive Agriculture) |
| East | Lost Hills Oilfield and Undeveloped Federal Land | 8.4/2.10 (Mineral and Petroleum (5-acre min.)/Nearby Solid Waste Disposal Facility)<br>1.1 (State and Federal Land) | A (Exclusive Agriculture) |
| West | Undeveloped Land | 8.3/2.10 (Extensive Ag, 20-acre min)/Nearby Solid Waste Disposal Facility)<br>3.4.1/2.10 (Solid Waste Disposal Facility Buffer/Nearby Solid Waste Disposal Facility)<br>3.4 (Solid Waste Disposal Facility) | A (Exclusive Agriculture) |

## 1.3 PROJECT SITE HISTORY AND EXISTING OPERATIONS

### 1.3.1 Lost Hills Environmental, LLC Landfill (Site A)

Historically, the 331-acre project Site A was a portion of the HM Holloway open pit gypsum mine, which has operated for over 70 years. The project site is currently developed as a Class III non-hazardous industrial landfill facility approved to accept fly ash, lime cake, auto shredder waste, spent sandblast media, and Class A and B dewatered biosolids. As described above, the existing landfill facility was initially approved in 1997 via a CUP (CUP 7, Map 28), which was subsequently rescinded and replaced by the approval of CUP 9, Map 28, which was then modified in 2013, 2016, and 2017 to result in the current site boundary, disposal pit boundary, days and hours of operation, ancillary equipment, and waste streams. One Environmental Impact Report (EIR), two Addendum EIRs, and one Negative Declaration have been prepared and adopted for the project site. In addition to the approved CUP, the facility operates under California Regional Water Quality Control Board (RWQCB) Central Valley Region Wastewater Discharge Requirements (WDRs) Order number R5-2010-0123, and Solid Waste Facility Permit (SWFP) (SWIS 15-AA-0308) issued by the Local Enforcement Agency (LEA) (Kern County Environmental Health Services Division acting as the LEA for the California Department of Resources Recycling and Recovery [CalRecycle]). As noted above, the current project includes a request to modify the existing landfill CUP. Subsequent to modification of CUP 9, Map 28, the project would require modification of the existing WDRs, SWFP, and Authority to Construct (ATC) and Permit to Operate (PTO).

As allowed by CUP 9, Map 28, the facility operates from 6:00 a.m. to 4:00 p.m., 7 days a week. Employees are on site 10 hours per day. Within a 24-hour period, there are currently 10 employees working at the landfill. Waste material is delivered to the facility by truck/trailer combination with

approximately 25-yards capacity. CUP 9, Map 28 allows for up to 91 trucks per day, with a maximum of 564 trucks per week allowed to enter the facility; total deliveries of up to 2,000 tons per day (tpd), with a maximum of 12,000 tons per week authorized. Trucks utilize I-5 to SR-46 to access Holloway Road from the south and I-5 to Twisselman Road to access Holloway Road from the north. Trucks traveling from coastal areas utilize U.S. Route 101 (US 101) to SR-46 from the west.

Class A and B dewatered biosolids, auto shredder waste, fly ash, and lime filter cake are currently approved for landfill acceptance and are noted below in Table 2, *Currently Permitted Operations*. Waste streams are separated into assigned landfill pits by material. Pit "E" is at grade and is approved to receive treated auto shredder waste, fly ash, and lime filter cake. Pit "F" receives spent sandblast media, fly ash, treated auto shredder waste, and lime filter cake. Pit "G" and connecting Pit "F/G" are approved to receive dewatered Class A and B biosolids and fly ash as co-disposal; additionally, spent sandblast media, treated auto shredder waste, and lime cake may also be disposed of in both pits ("G" and "FG"), but are kept segregated from the biosolids disposal area. Waste materials are transported from areas throughout central California, southern California, and coastal areas to the project site using commercial trucking.

**Table 2: Currently Permitted Operations**

| CUP Boundary | Disposal Footprint | Disposal Capacity | Days and Hours of Operations | Maximum Number of Trucks Delivering Waste to the Landfill | Maximum Tonnage of Waste Accepted |
|---|---|---|---|---|---|
| 331 Acres | 193 acres (gross)<br>176 acres (net) | 8.35 MCY | 7 days per week,<br>6:00 a.m. to 4:00 p.m. | 91 Trucks (daily)<br>546 Trucks (weekly) | 2,000 Tons (daily)<br>12,000 Tons (weekly) |

Upon arrival at the landfill, trucks delivering waste materials are weighed at a scale located at the Holloway, LLC administration office directly across Holloway Road from the landfill entrance gate. Once weighed and registered, trucks access the landfill via a gate located at the northernmost edge of the landfill via a private dirt road that separates the landfill facility from the mining facility. The deliveries are directed to the appropriate pit and off loaded to a laydown area near the corresponding disposal pit. Biosolids and fly ash are placed in windrows and mixed by employees using a dozier with a blade and then placed into the appropriate pit. Trucks exit through a truck rinse area where debris is rinsed from the truck and trailer. The truck then returns to the scale for weighing prior to leaving the facility.

### 1.3.2 Lost Hills Mine, LLC (Site B)

Site B is comprised of 6 acres currently sited within a portion of the Holloway Gypsum Mine CUP boundary (CUP 1, Map 28). The site has historically been used for large equipment storage and staging. It is located directly east of the existing Lost Hills Environmental Landfill site, across Holloway Road, and directly south of the existing facility parking and administrative buildings used for both the mine site and the landfill site. An EIR was prepared for the site in 1982 when it was originally permitted. The project includes a request to remove Site B from CUP 1, Map 28, and issue a new CUP to allow for the construction and operation of a waste-to-energy biomass gasification facility.

### 1.3.3 Previous Operational Approvals

**2008 (Original CUP – Approved)**. The original HM Holloway Landfill was approved, and an EIR (State Clearinghouse No. 2002111102) was certified by the Board of Supervisors on April 2, 2008.

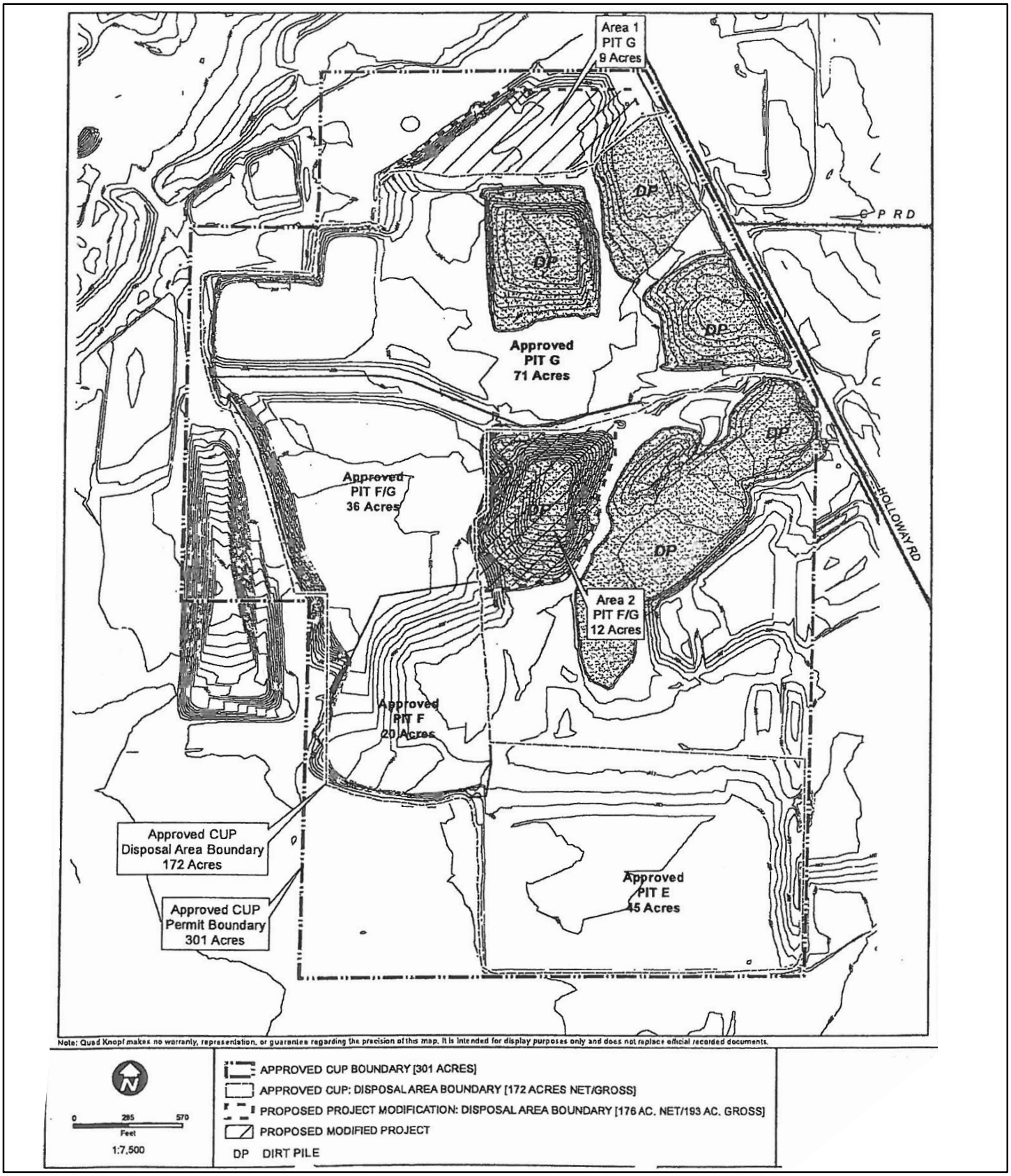
The originally approved project consisted of the development of a Class III non-hazardous industrial waste landfill on 301 acres of land with a total disposal capacity of 8.35 million cubic yards (MCY). The approved project area consists of four contiguous disposal pits identified as Pits E, F, and G and the Pit F/G Connection area. The approvals and current request are summarized in Table 3, *Currently Permitted Waste Streams*.

**2013 (1st Modification to CUP – Approved)**. Since approval of the landfill in 2008, the applicant has participated in ongoing compliance with the regulatory requirements of the RWQCB and the California Occupational Health Association (CalOSHA). As a result of required compliance activities, such as the installation of a leachate system, the increased slope of pit walls and floors, and the installation of berms separating the pits and buffering the gas monitoring well, the total capacity of the landfill was reduced. In 2013 the project proponent requested to modify the existing footprint of the two disposal pits in order to maintain the landfill capacities as identified in the originally approved project (Table 2, *Currently Permitted Operations*), and the request was approved by the Planning Commission on October 24, 2013 (Resolution 102-13). The 2013 approval increased the size of the disposal pit boundaries, which required a modification of the previously approved CUP 9, Map 28. The proposed modification revised the site plan to increase the size and location of the boundaries of Pit G and the Pit F/G Connections area (Figure 5, *2013 Site Plan*). The aforementioned modification added approximately 9 acres to Pit G and approximately 12 acres to the Pit F/G Connection area. At that time, the applicant did not request any changes to the approved CUP boundary for the landfill, changes to the landfill's capacity, increases in permitted daily volume of incoming materials, or changes to allowed waste streams.

**2016 (2nd Modification to CUP – Approved)**. The project proponent submitted a request in 2015, which was approved by the Board of Supervisors on March 15, 2016, to revise the approved project as follows:

1. A General Plan Amendment to Map Code 3.4/2.10 for the approximately 30-acre expansion area, and a General Plan Amendment to Map Code 3.4.1 and 3.4.1/2.10 for the approximately 128-acre buffer area of 1,320-feet around the facility. The policies of the KCGP require each solid waste disposal facility to obtain a 3.4 land use designation, as well as a buffer area of 1,320 feet around the facility;
2. Amend Appendix E of the KCGP to replace HM Holloway Solid Waste Facility Map; and
3. Amend project boundaries and conditions of CUP 9, Map 28 to allow for the relocation of required monitoring equipment and adjustment in facility closure date in an A (Exclusive Agriculture) District. This proposal did not include a request to increase the total disposal capacity or location of disposal pits to the previously approved project site.

**2017 (3rd Modification to CUP – Approved)**. The project proponent submitted a request in 2016, which was approved, for a modification to the previously approved HM Holloway Landfill Project by HM Holloway, Inc., to amend condition of approval (rr) to modify the days of operation for the facility from 6 days per week (i.e., Monday through Saturday) to 7 days per week, and to restrict daily operating hours to 10 hours per day (i.e., 6:00 a.m. and 4:00 p.m.). The applicant indicated the Kern County Public Health Department/Environmental Health Services Division approved SWFP No. 15-AA-0308, allowing the landfill to operate 7 days per week, between the hours of 6:00 a.m. and 4:00 p.m. The proposal intended to allow for consistency in the permitted hours/days of operation for the landfill between CUP 9, Map 28 and the aforementioned SWFP.




**Mod. No. 1, CUP No. 1, Map 28; Mod. No. 2, CUP No. 9, Map 28; CUP No. 13, Map 28**

**Figure 5. 2013 Site Plan**

**Table 3: Currently Permitted Waste Streams***

| Waste Stream Category | Description | Disposal Pit |
|---|---|---|
| Fly Ash (Cogeneration Ash) (2008) | Very high temperature combustion byproduct of oil field cogeneration facility burning, consisting primarily of very fine silica shards. | "E," "F;" "G," "FG" (co-disposal of Biosolids) |
| Lime Cake (2008) | Loose granular calcium carbonate solid that is used in bulk form within water clarifier or filtration systems of oil field production systems. | "E," "F;" "G" (segregated from Biosolids) |
| Treated Auto Shredder Waste (2008) | Predominately non-metallic solid material including plastic, broken glass, rubber, soil, and fabric that have been separated from the recyclable metals; prior to disposal in a landfill, auto shredder waste is treated off-site by the generator to chemically bind soluble heavy metals. | "E," "F;" "G,""FG" (segregated from Biosolids) |
| Dewatered Class A & B Biosolids (2008) | Treated solid, semi-solid, or liquid residues generated during the treatment of sewage in a wastewater treatment works that meet 40 Code of Federal Regulations (CFR) Part 503 requirements specified in 503.32(b) for pathogen reduction, 503.33 for vector attraction reduction, and 503.13, Table 1 for pollutant concentrations; these residues include, but are not limited to, scum or solids removed in primary, secondary or advanced wastewater treatment processes, and material derived from sewage sludge (2008) | "G," "FG" |
| Spent Sandblast Media (2008) | Waste that results from preparing the surfaces of steel structures and tanks for recoating to provide corrosion protection for the surface consisting of the abrasive debris and the paint/primer and metal surface residues that are generated during the sandblasting surface preparation phase | "F;" "G," "FG" (segregated from Biosolids) |

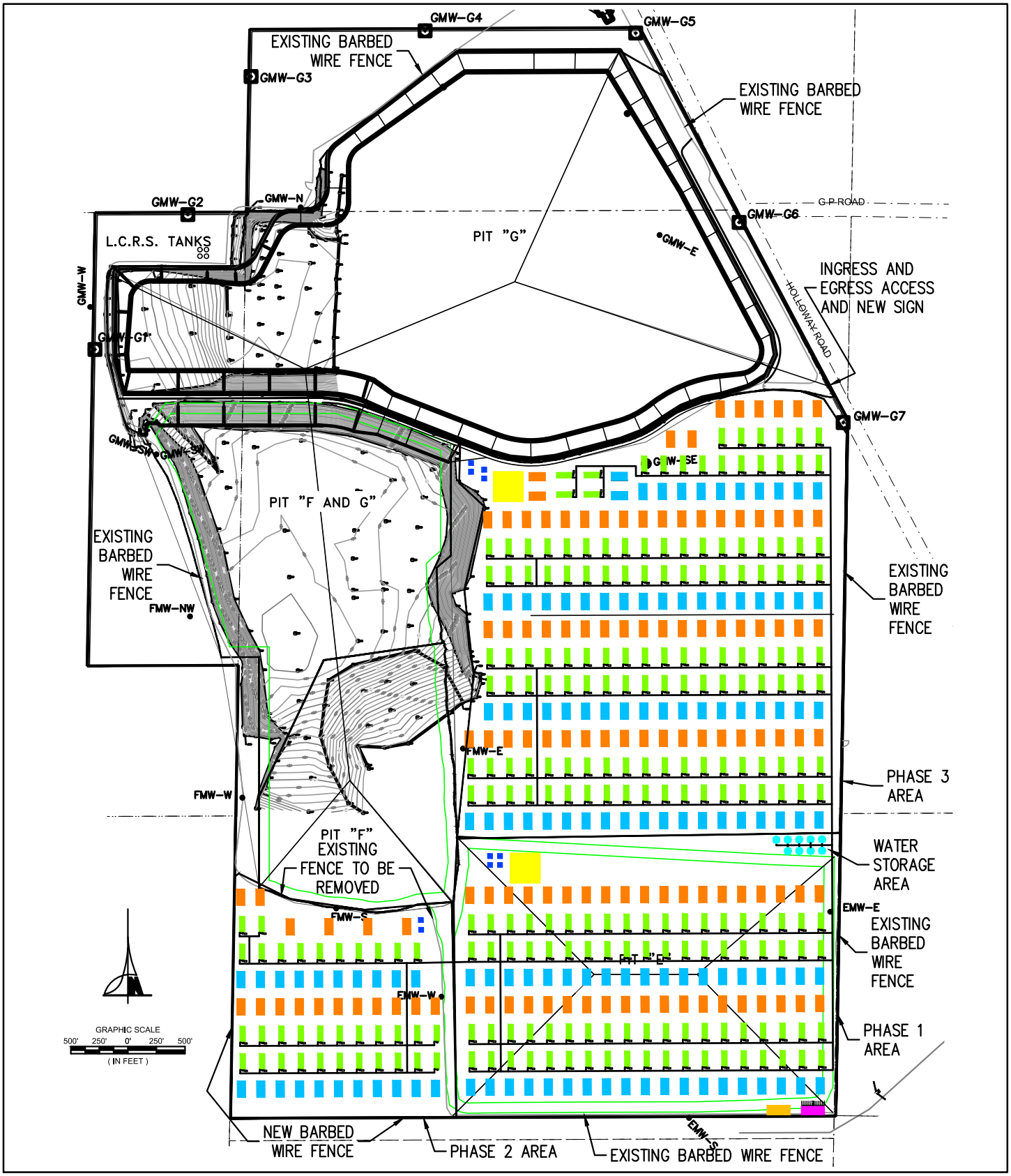
* As listed in 2008 Environmental Impact Report and as approved by Board of Supervisors on July 13, 2010, and February 22, 2011.

## 1.4 PROPOSED MODIFICATIONS

The project includes a request for land use entitlements necessary to facilitate the construction and operation of extended aerated static pile composting operation on a portion of the landfill that has reached capacity, to facilitate the following modifications to the existing landfill permits to allow for additional waste streams to be disposed of within the landfill, and to extend the hours of operation to 24 hours a day, 365 days per year. See Figure 6A, *Composting Facility Site Layout*, and Figure 6B, *Typical Pile Layout*, for a detailed site plan for the composting operation.

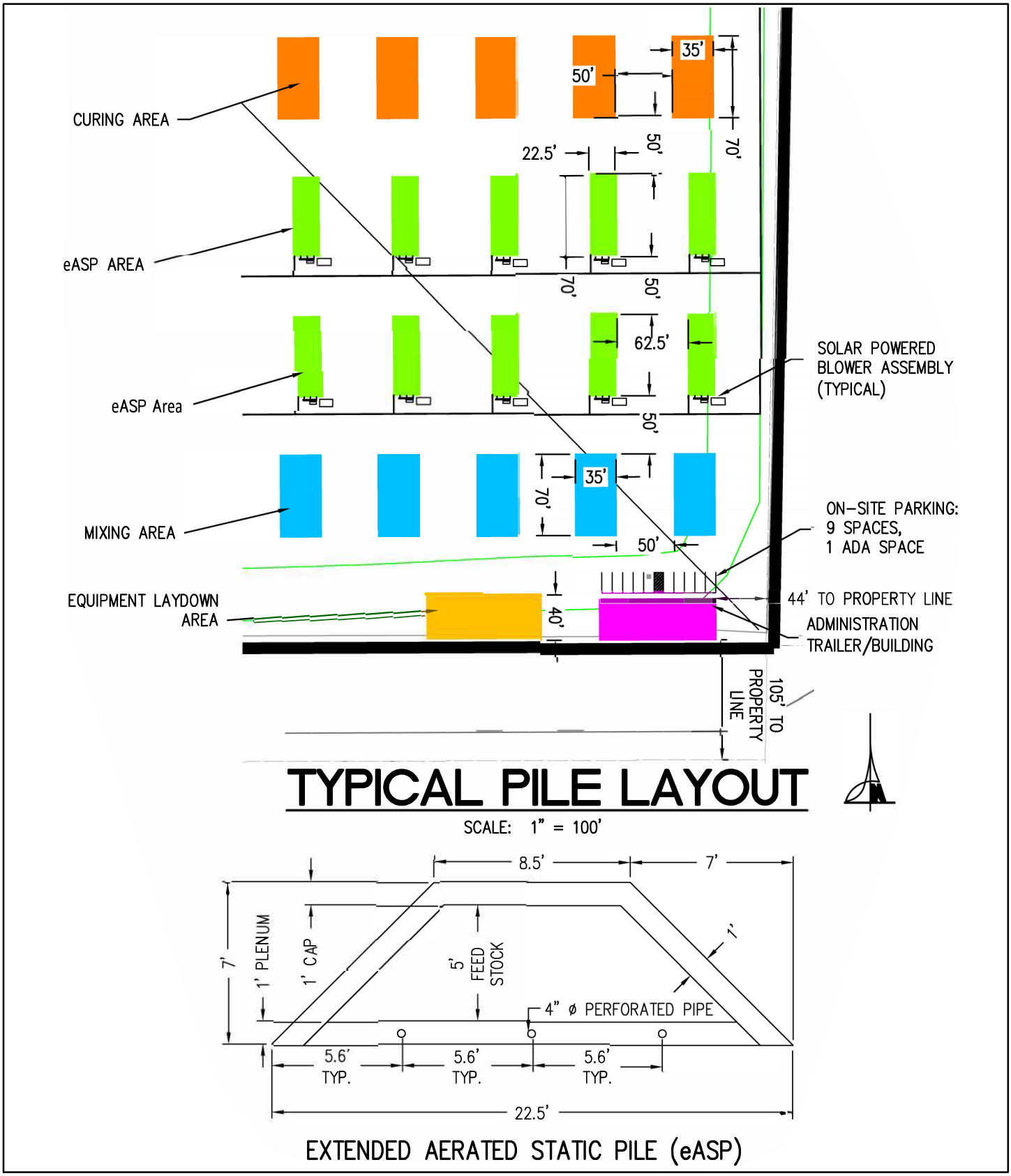
Additionally, the project includes a request for land use entitlements necessary to facilitate the construction and operation of a 3-megawatt (MW) (net) waste-to-energy biomass gasification (bioenergy) facility on a portion of the Holloway Gypsum Mine. Modification of CUP 1, Map 28 would be necessary to remove the bioenergy project site (Site B) from the existing mine site CUP. A new CUP is requested for the bioenergy project site. See Figures 7A through 7G, *Bioenergy Facility Site Layout*, for a detailed site plan for the bioenergy facility.

The components of each portion of the proposed project are discussed in detail below.



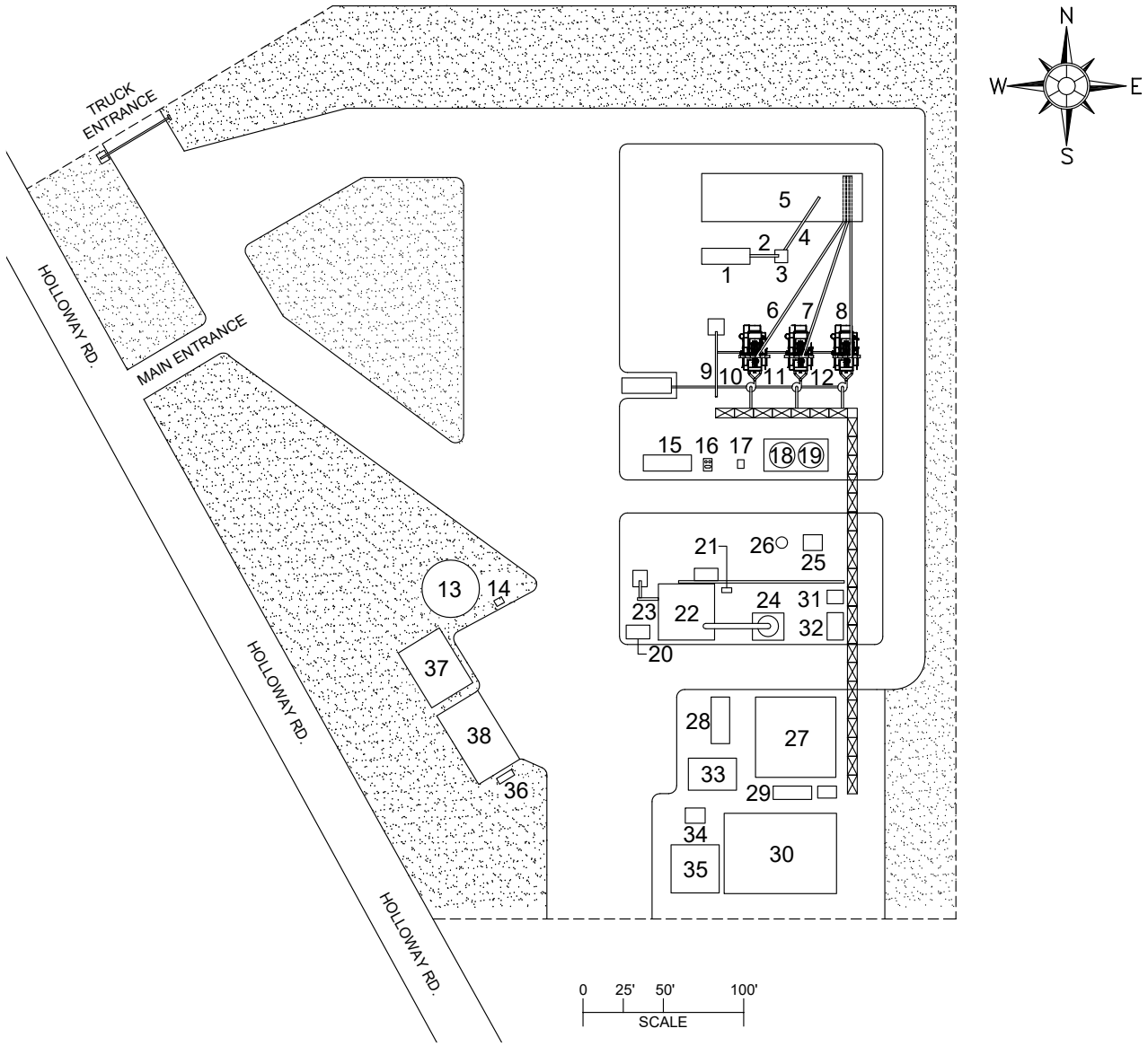

**Mod. No. 1, CUP No. 1, Map 28; Mod. No. 2, CUP No. 9, Map 28; CUP No. 13, Map 28**

**Figure 6A. Composting Facility Site Layout**




**Mod. No. 1, CUP No. 1, Map 28; Mod. No. 2, CUP No. 9, Map 28; CUP No. 13, Map 28**

**Figure 6B. Typical Pile Layout**



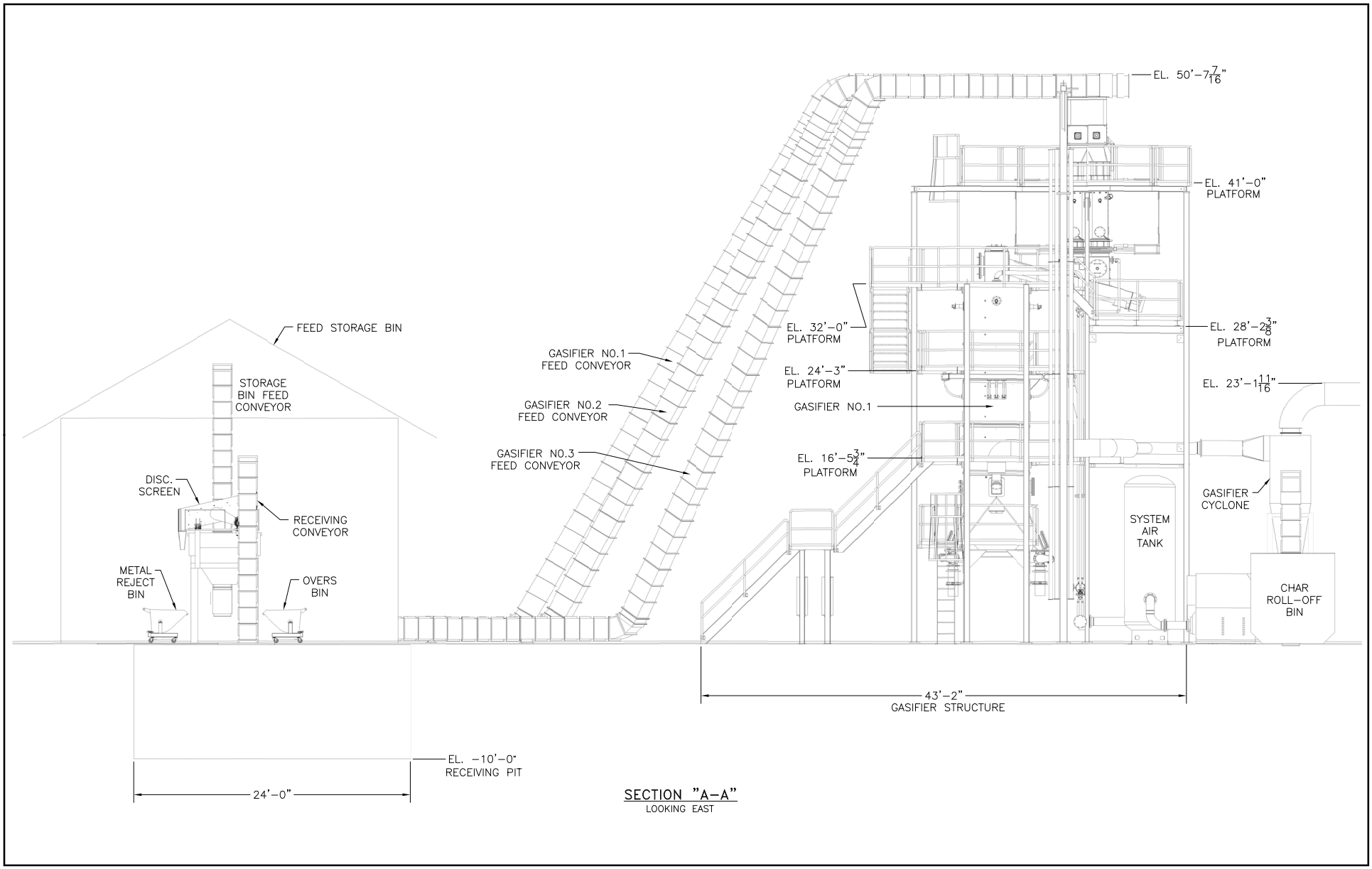




| ARIES EQUIPMENT | | |
|---|---|---|
| NO. | TAG | DESC. |
| 1 | SC-1101 | CHAIN RECLAIMER |
| 2 | CO-1101 | RECEIVING CONVEYOR |
| 3 | DS-1101 | DISC. SCREEN |
| 4 | CO-1102 | STORAGE BIN FEED CONVEYOR |
| 5 | BN-1102 | FEED STORAGE BIN |
| 6 | CO-1104 | GASIFIER NO.1 FEED CONVEYOR |
| 7 | CO-1105 | GASIFIER NO.2 FEED CONVEYOR |
| 8 | CO-1106 | GASIFIER NO.3 FEED CONVEYOR |
| 9 | SC-7101 | MAIN CHAR COOLING AUGER |
| 10 | GA-3301 | GASIFIER NO.1 |
| 11 | GA-3401 | GASIFIER NO.2 |
| 12 | GA-3501 | GASIFIER NO.3 |
| 13 | TK-9301 | RAW WATER TANK |
| 14 | PKG-9302 | FIRE WATER PUMP PACKAGE |
| 15 | E-9101 | WATER COOLER |
| 16 | V-9101<br>P-9101A/B<br>E-9101 | COOLING WATER TANK/PUMPS/WATER COOLER PACKAGE |
| 17 | BL-4201 | COMBUSTION AIR BLOWER |
| 18 | TO-4101 | THERMAL OXIDIZER |
| 19 | HX-4201 | HEAT RECOVERY NO.1 |
| 20 | P-5101 | AQUA AMMONIA PUMP SKID |
| 21 | BL-5102 | SORBENT BLOWER |
| 22 | FL-5101 | EMISSION CONTROL FILTER |
| 23 | SC-5102/5103 | WASTE SCREW CONVEYOR NO.1 & 2 |
| 24 | HX-4102 | HEAT RECOVERY NO.2 |
| 25 | FN-5102 | I.D. FAN |
| 26 | ST-5101 | STACK |
| 27 | ORC-6101 | ORC BUILDING |
| 28 | TK-6101 | ORC AUX. TANK |
| 29 | E-6102 | ORC REGENERATOR |
| 30 | ACC-6101 | ACC ARRAY |
| 31 | NA | HO PACKAGE |
| 32 | HX-4202 | OIL COOLER |
| 33 | NA | SUB STATION |
| 34 | NA | XFMR |
| 35 | NA | HIGH VOLTAGE SWITCHYARD |
| 36 | NA | EMERGENCY GEN. |
| 37 | NA | BOP / WATER SYSTEMS / UTILITY BUILDING |
| 38 | NA | CONTROL ROOM AND MCC BUILDING |

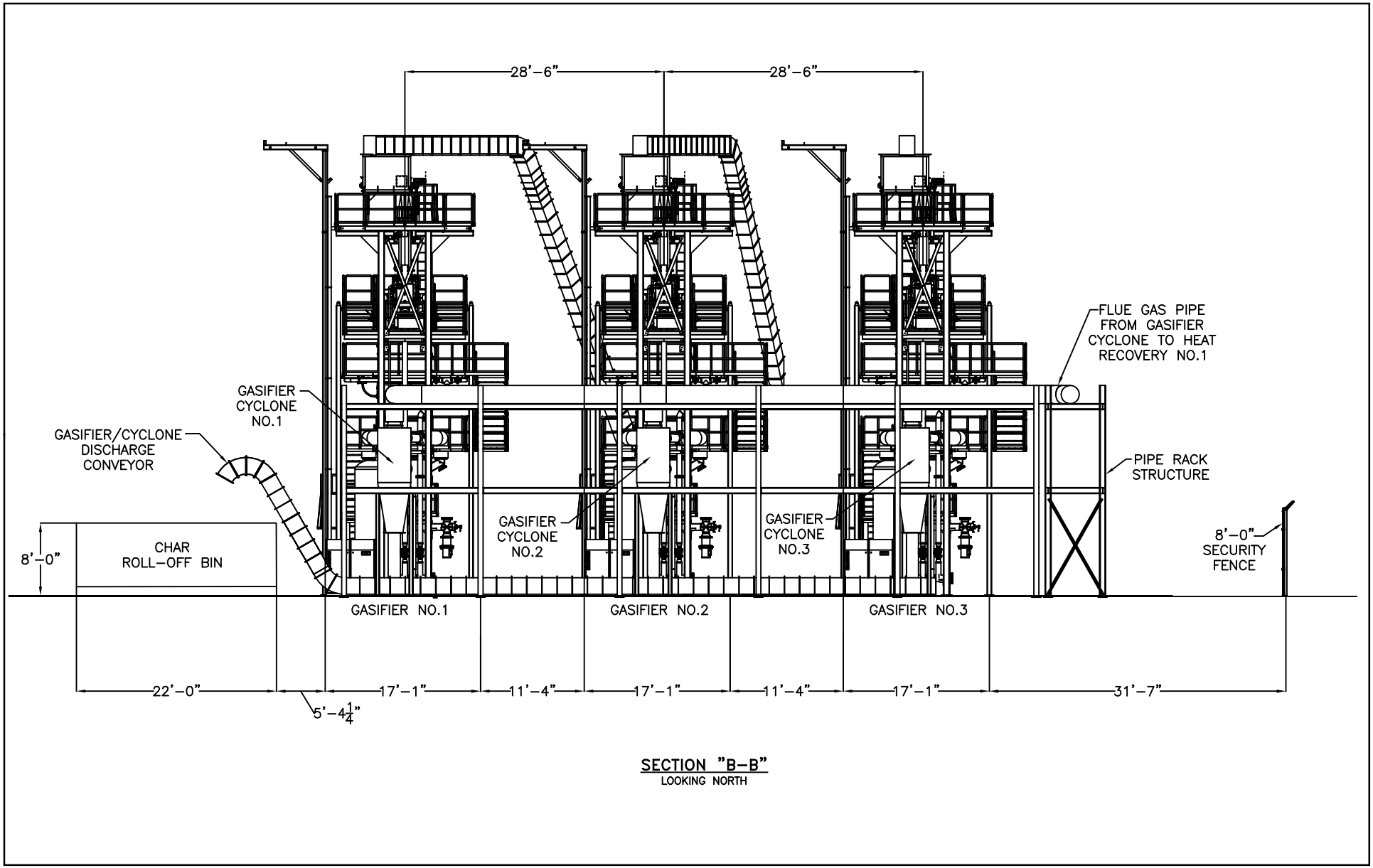
**Mod. No. 1, CUP No. 1, Map 28; Mod. No. 2, CUP No. 9, Map 28; CUP No. 13, Map 28**

**Figure 7A. Bioenergy Facility Site Layout**




**Mod. No. 1, CUP No. 1, Map 28; Mod. No. 2, CUP No. 9, Map 28; CUP No. 13, Map 28**

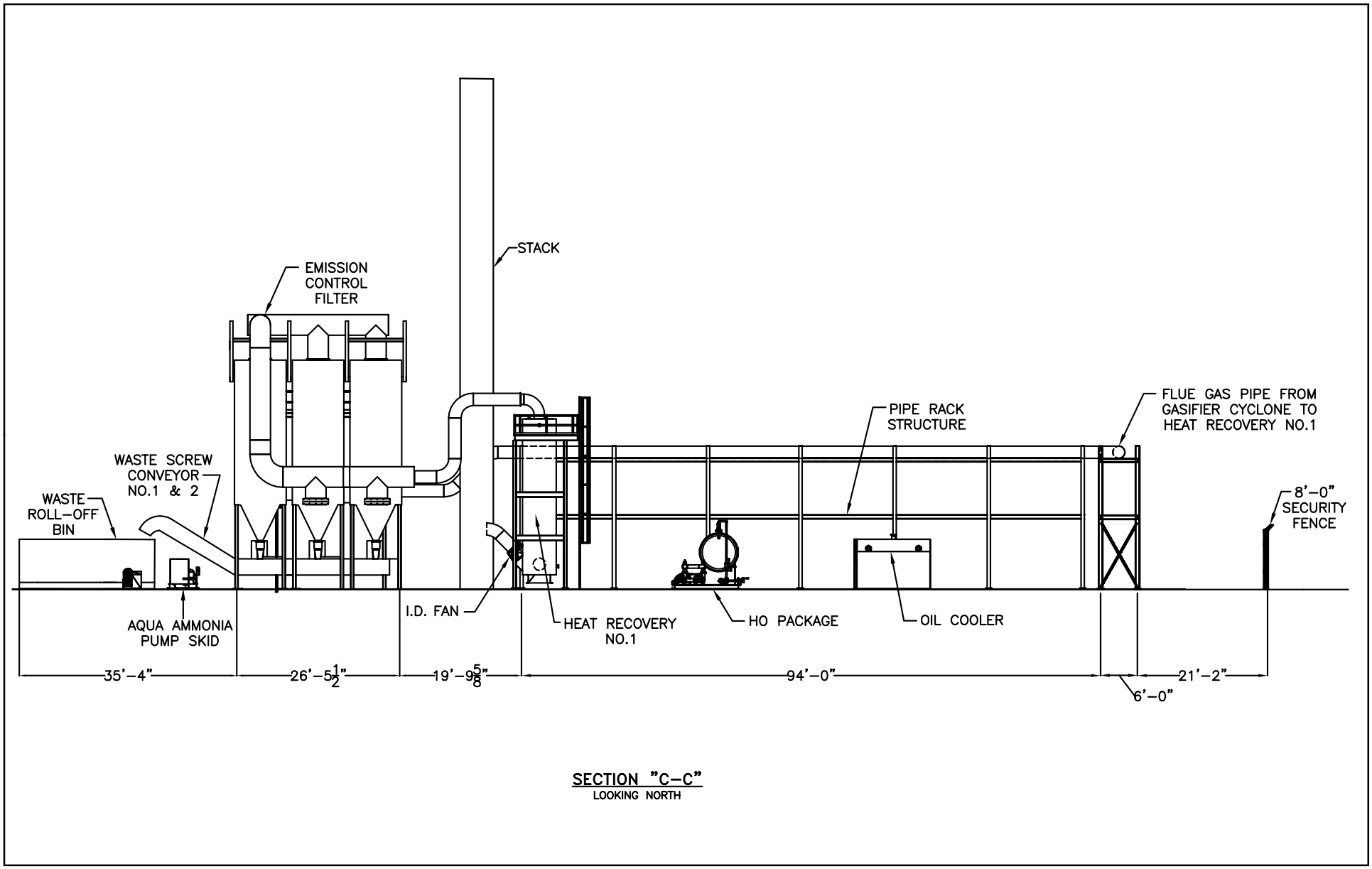
**Figure 7B. Section A-A, Bioenergy Facility**




SECTION "B–B"
LOOKING NORTH

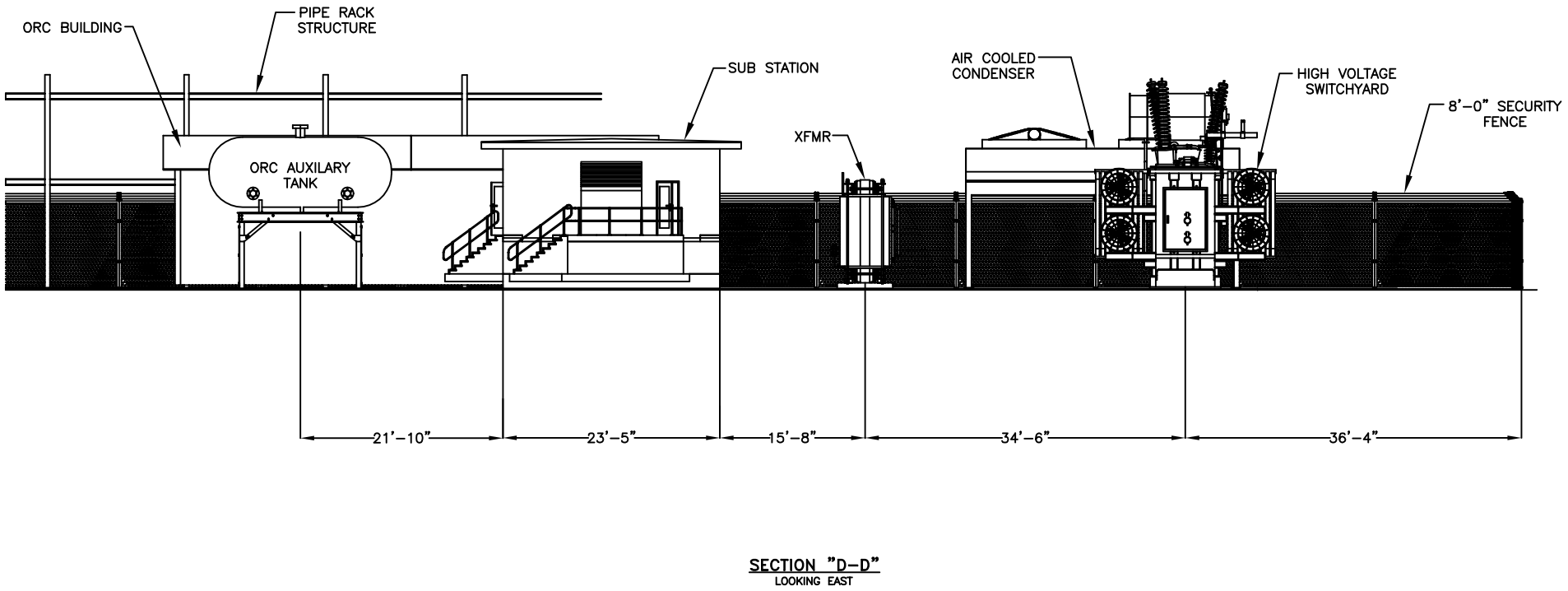
**Mod. No. 1, CUP No. 1, Map 28; Mod. No. 2, CUP No. 9, Map 28; CUP No. 13, Map 28**

**Figure 7C. Section B-B, Bioenergy Facility**



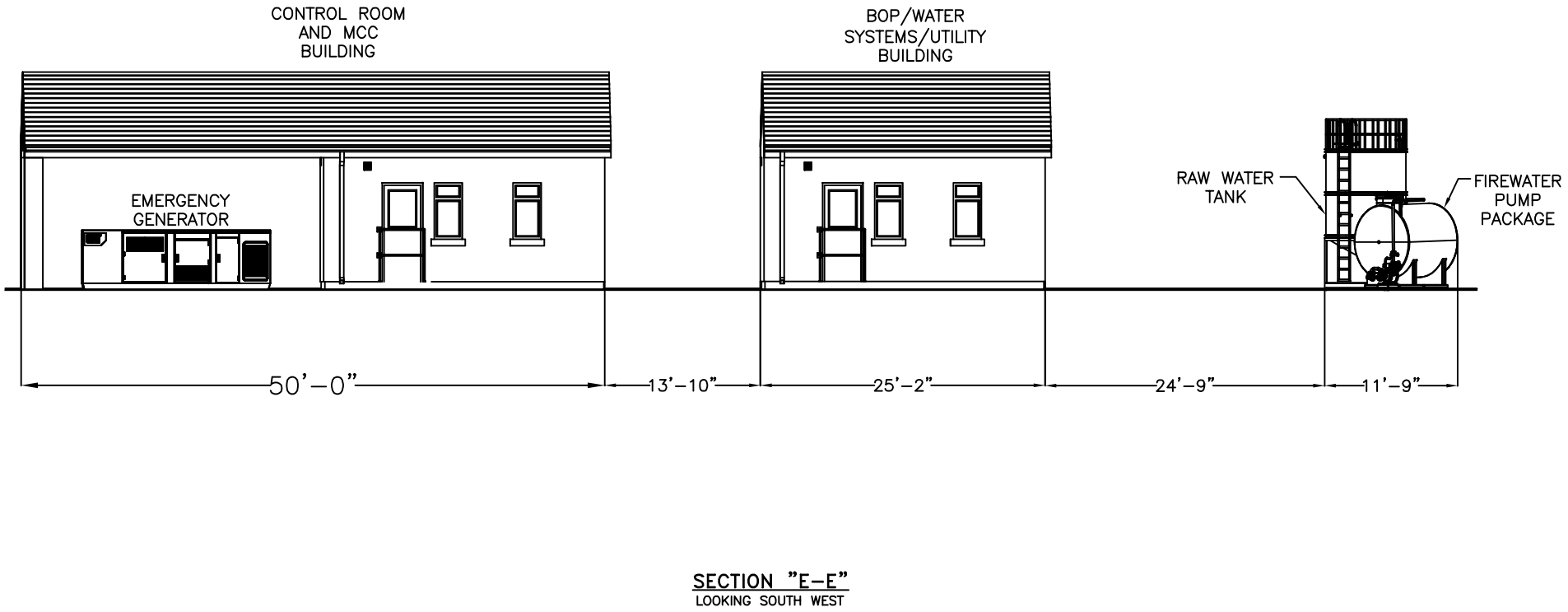

SECTION "C-C"
LOOKING NORTH

**Mod. No. 1, CUP No. 1, Map 28; Mod. No. 2, CUP No. 9, Map 28; CUP No. 13, Map 28** **Figure 7D. Section C-C, Bioenergy Facility**




SECTION "D-D"
LOOKING EAST

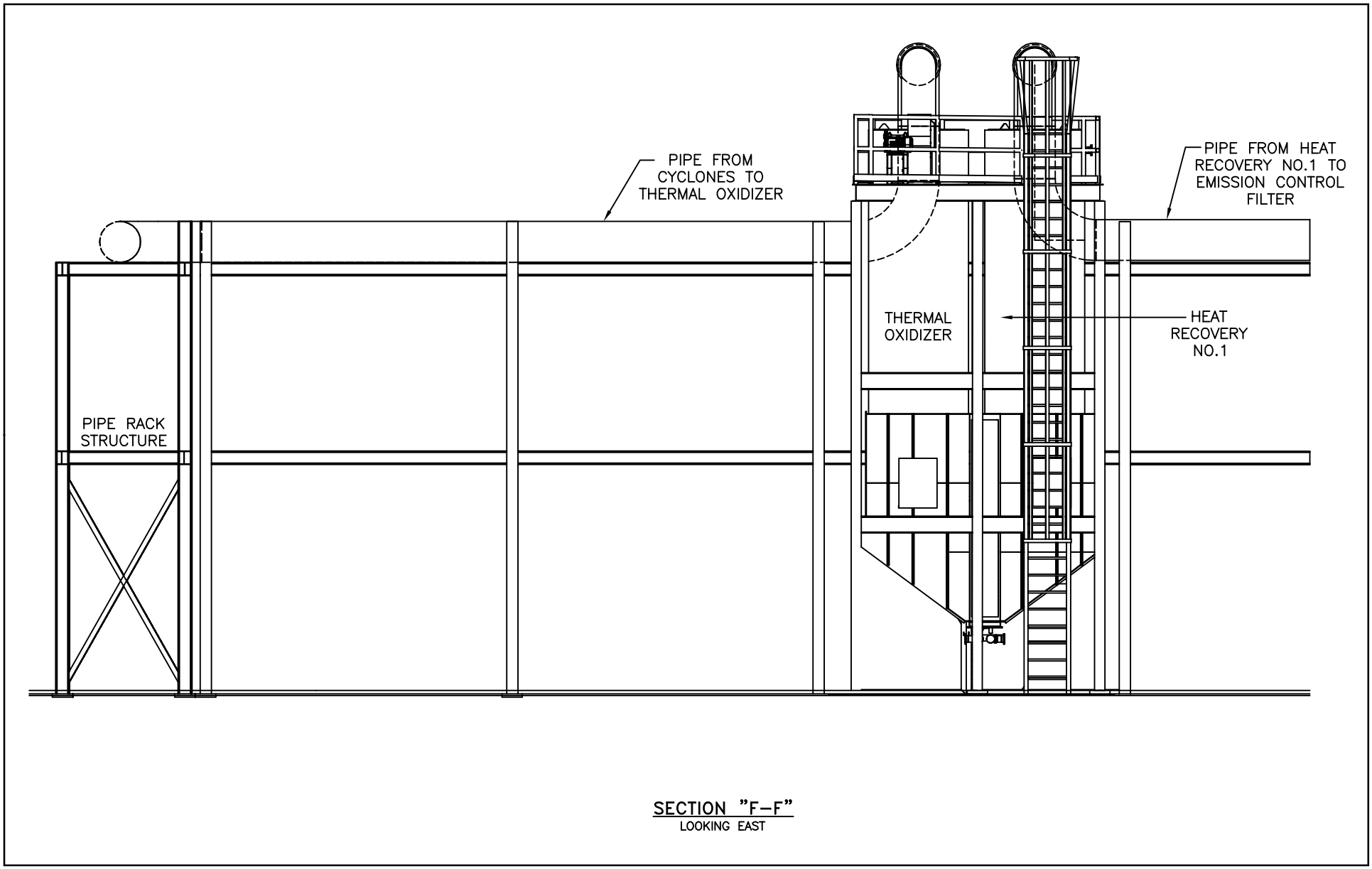
**Mod. No. 1, CUP No. 1, Map 28; Mod. No. 2, CUP No. 9, Map 28; CUP No. 13, Map 28** **Figure 7E. Section D-D, Bioenergy Facility**




SECTION "E–E"
LOOKING SOUTH WEST

**Mod. No. 1, CUP No. 1, Map 28; Mod. No. 2, CUP No. 9, Map 28; CUP No. 13, Map 28**

**Figure 7F. Section E-E, Bioenergy Facility**




**Mod. No. 1, CUP No. 1, Map 28; Mod. No. 2, CUP No. 9, Map 28; CUP No. 13, Map 28**

**Figure 7G. Section F-F, Bioenergy Facility**

## 1.4.1 Project Component Overview

### 1.4.1.1 eASP Composting System

The State of California continues to pass legislation directing more diversion from landfills, which results in a higher demand for resource recovery, recycling, and composting. Approximately 30 percent of what currently goes to landfills is organic material and should be composted or recycled. Notable recent bills signed by Governor Brown include Assembly Bill (AB) 341, which is designed to help meet California's recycling goal of 75 percent by 2020; AB 1594, which eliminates the use of green waste as alternative daily cover at a landfill to be considered diversion; Senate Bill (SB) 1383, which establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste by 2020 and a 75 percent reduction by 2025; and AB 1826, which requires commercial businesses in 2016 to separate their food and yard wastes for composting and anaerobic digestion. This will result in a greater demand for composting of food and green organic materials. Reducing emissions from waste landfills is also an important component of the state's greenhouse gas (GHG) reduction and climate programs. The tonnage of available compostable food waste is unknown at this time but is anticipated to gradually increase as communities begin to implement food waste collection programs.

The composting process involves the breakdown of organic material by aerobic bacteria in the presence of oxygen. The provision of oxygen (or aeration) is a key component in the composting process. Traditional composting utilizes an open windrow process, which involves placing organic material into elongated open piles ("windrows") and using equipment to regularly turn the material to provide adequate air flow. A forced air system, or aeration system, would utilize technology to provide a consistent source of oxygen for the composting process. Aeration systems not only provide more efficiency but can also reduce the space and time needed for the process. Constant airflow has the potential to provide significant odor control by maintaining aerobic conditions, thereby reducing the potential for anaerobic conditions that cause odors. Aeration systems can also reduce volatile organic compounds (VOC) emissions that would otherwise escape into the atmosphere. In 2011, the San Joaquin Valley Air Pollution Control District (SJVAPCD) implemented Rule 4566, a measure to control VOC emissions from composting operations. Aeration systems are considered an approved technology for VOC reduction under Rule 4566. The aeration system would include a bio-filter and/or bio-cover of cured compost in compliance with Rule 4566.

Similar to the aerated composting process detailed above, an extended aeration static composting system utilizes air forced through abutting rows of feedstock during the active composting phase. Adding an aeration system only changes the active composting phase. The shape would depend on the selected technology, but typically the high efficiency of aeration systems allows for larger active composting piles. As proposed, the composting piles would have a maximum height and slope to provide for the best aeration depending on the design of the final system selected. Active composting is proposed to take place over twenty-eight days. The material would be moisture conditioned and kept at the appropriate temperatures for pathogen reduction. During the composting process, a temperature probe will be used to take measurements daily to ensure minimum temperature standards are maintained per Section 17868.3 of Title 14 of the California Code of Regulations. In order to meet these requirements, a temperature of 131 degrees Fahrenheit must be maintained for a period of at least three days.

#### Site Preparation

In preparation for the composting operation, the Pit "E" area of the site would undergo final closure construction. This would be completed by partially excavating the material in Pit "E", re-compacting, and sealing the closure cover with clay soil found onsite to provide a stable surface

for heavy equipment to operate. The areas adjacent to Pit "E," as seen in Figure 5, *2013 Site Plan*, currently used for overburden storage, would be graded to provide a level surface for composting operations during the proposed phases two and three (Figures 6A and 6B). Additional site improvements may be required by the State Water Resources Control Board (SWRCB) as part of the approval process for this project. The facility currently has site-specific Waste Discharge Requirements (WDRs). These would need to be revised to reflect operational changes associated with this project and additional regulatory requirements imposed by the SWRCB.

### Construction

The project proponent proposes the construction of an extended aeration composting system on 136.2 acres in the general area of Pit "E" (including the areas adjacent to Pit "E" which are currently used for overburden storage) and would include infrastructure to force air flow into compost material during the active compost phase. At full buildout, the compost facility would include 240 compost pads (active composting piles and compost curing piles) and would be capable of accepting up to 640,000 tons per year (tpy) of compostable materials, including up to 320,000 tpy of green waste, herbivore manure, food material, digestate, and Class A and B biosolids; and 320,000 tons per year of wood waste. Installation of the full composting system would be implemented in three phases. The construction schedule will depend on demand for compost, but it is assumed that the construction of all three phases will be complete no later than 2030. Construction of Phase 1 would occur in 2020; Phase 2 in 2025; and Phase 3 in 2030. The infrastructure for each phase would take approximately 30 to 60 days to complete and become operational once approvals have been obtained. The construction of the compost facility would consist primarily of the grading of the sites, the excavation of retention ponds, and the installation of solar-powered blowers for aerating compost piles.

### Operations

The proposed 640,000 tpy composting operation would be constructed in three phases over an approximately 10-year timeframe, depending on market demand. Table 4, *Compost Area Organic Feedstock Tonnage and Sites per Phase*, below, shows the breakdown of area, number of composting sites (rows), and tonnage (not including wood waste for each phase and full buildout).

**Table 4: Compost Area Organic Feedstock Tonnage and Sites per Phase**

| Phase | Area | Composting Sites | Tons per Year (tpy) *Not Including Wood Waste |
|---|---|---|---|
| 1 | 47.3 acres | 76 rows | 101,308 tpy |
| 2 | 21.2 acres | 34 rows | 45,322 tpy |
| 3 | 67.7 acres | 130 rows | 173,290 tpy |
| **Total at Full Buildout** | **136.2 acres** | **240 rows** | **319,920 tpy** |

The composting process would take place on 240 composting sites in the facility. Each composting site would be equipped with a pair of 1.5-horsepower blower motors powered by a small array of solar cells with a backup battery supply. The blowers would be connected to a manifold that would lead to three 4-inch perforated pipes that would run down the center of the compost pile. These pipes would be covered with approximately one foot of woody biomass material. The goal is to create an aeration zone beneath the active compost pile that allows for uniform airflow up through the active compost material.

All compostable materials would be chipped and ground off site and would be trucked to the site and off-loaded in a mixing area adjacent to the composting sites. It is expected that a 50/50 mixture by volume of woody biomass to biosolids/food organic materials would be mixed with a Scarab-style windrow turner. The mixture would then be moved to the composting row via a front-end loader. On top of the aeration zone, the 50/50 mixture would be placed into cells 70 feet long and 22.5 feet wide with a height of between five to nine feet containing approximately 318 cubic yards. It is assumed that the biosolids/food waste and wood waste would have sufficient moisture to begin the composing process, and additional moisture would not need to be added during the mixing process. After the pile has been mixed and formed, the pile would be covered with a one-foot-deep layer of cured compost, which acts as a biofilter. The layer would be put in place by the front-end loader that formed the pile, assisted by an additional loader with a rake attachment to spread the cured compost over the top of the pile. This biofilter layer would serve to reduce the VOC emissions from the compost pile. After the pile has been covered, a sprinkler system would be placed along the top of the pile to maintain the moisture in the top layer.

Instead of turning, as is used in traditional windrow composting, proper oxygen would be provided by the solar-powered, forced aeration system. The piles would be aerated by the blower motors for two minutes out of every 20 and the sprinklers would run approximately every four hours to maintain proper moisture content. After the initial 28 days of composting, the piles would then be scooped up with a front-end loader and flipped into a new pile in the designated compost curing area to cure (Figures 6A and 6B). In order to reduce the chances of contamination of the composted pile, a separate front-end loader designated to move only cured compost would be used for this operation. The pile would then be left to cure for an additional 28 days. The curing process helps bring compost to full maturity. Each pile would then be tested for pathogens prior to being moved to the finished compost stockpile after curing is complete, the material would be screened on a trommel screen for material size sorting, and either used as cover for a new eASP rows or shipped off site for bulk sale.

Additional water supply would be needed for both the construction and operation of the compost facility. Beyond what is already being utilized by the existing landfill, it is anticipated the composting operation would have a water demand of approximately 20.4 acre-feet per month at full buildout. Water will be piped in from off-site wells and stored in 100,000-gallon tanks. The breakdown of expected water usage per phase of operation is shown in Table 5, *Compost Facility Water Usage*.

**Table 5: Compost Facility Water Usage**

| Phase | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| # of active sites | 76 | 34 | 130 | 240 |
| Gallons per day for eASP | 60,800 | 27,200 | 104,000 | 192,000 |
| Gallons per day for dust control | 8,000 | 4,000 | 15,000 | 27,000 |
| Total Water Demand per day (gallons) | 68,800 | 31,200 | 119,000 | 219,000 |
| Total Water Demand per month (gallons) | 2,092,667 | 949,000 | 3,619,583 | 6,661,250 |
| Total Water Demand per month (acre ft) | 6.4 | 2.9 | 11.1 | 20.4 |
| Total Water Demand per year (acre ft) | 76.8 | 34.8 | 133.2 | 244.8 |

### Additional Waste Streams for Composting

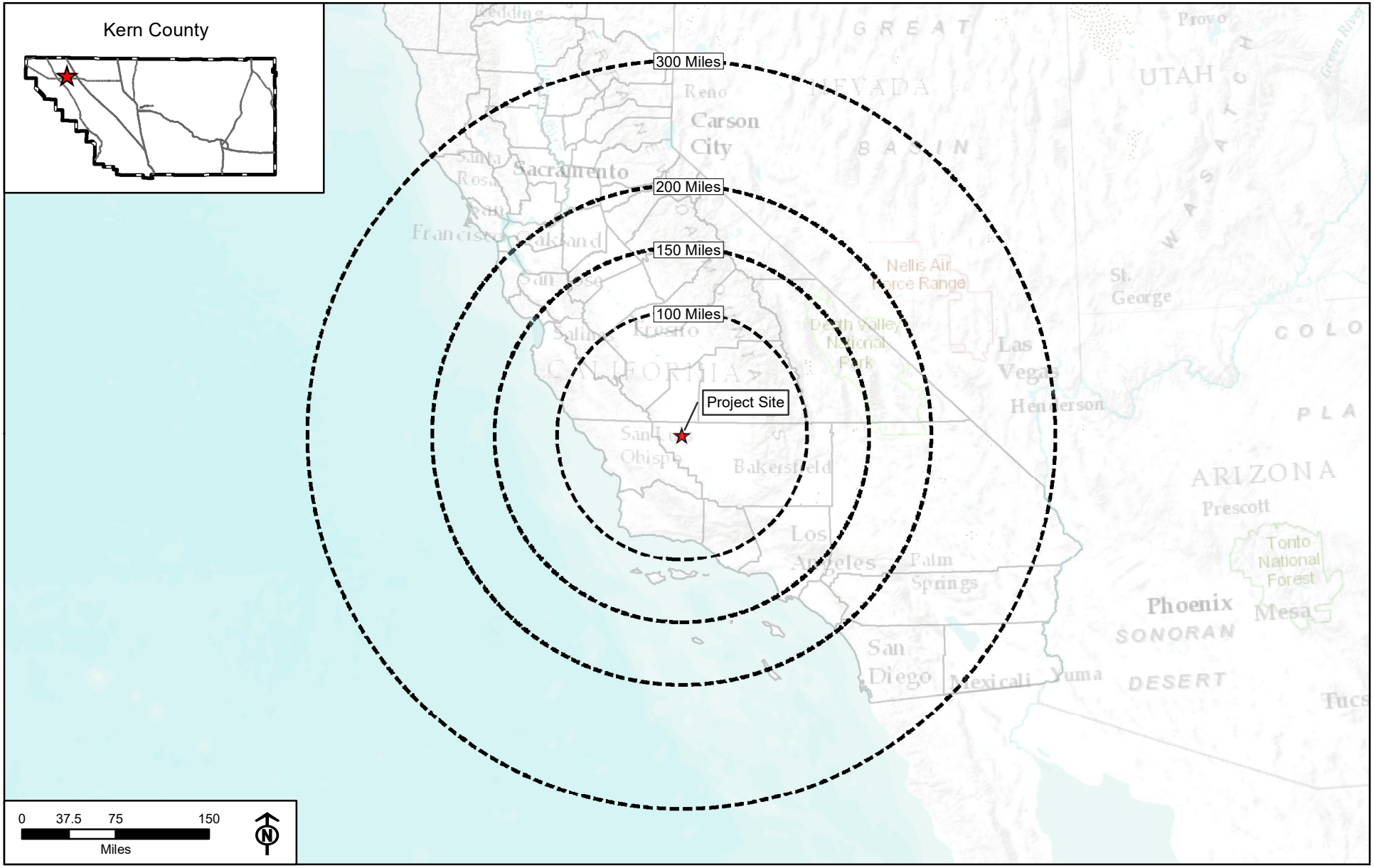
The project proponent is requesting to accept up to 320,000 tons per year (tpy) of composting feedstock composed of the following: green waste, herbivore manure, food material, digestate, and Class A and B biosolids; and 320,000 tons per year of wood waste. The project proponent proposes a blanket tonnage limit of 1,753 tons per day for all approved composting feedstocks. This would allow for operational flexibility to combine various feedstock types and quantities in order to create the highest quality product, without the constraint of sub-limits for specific types of compostable feedstock materials. In addition, specific tonnage limits could impede on goals to divert organic materials from the landfill.

Table 6, *Proposed Compost Feedstock*, lists the proposed feedstock list for the facility. Feedstock definitions listed in Table 7, *Feedstock Definitions for Feedstocks to be Accepted for Composting Under the Proposed Project (No Breakdown Limits)*, are taken directly from California Code of Regulation (CCR) Title 14 Section 17852. Incoming feedstock material would come from locations within a radius of 150-miles from the proposed project site. Figure 8, *Radius Map*, identifies the 150 mile range. Biosolids and manure would be accepted from various producers within the 200-mile radius and wood waste and green waste would be primarily accepted from Kern County farmers and the City of Bakersfield Mt. Vernon Recycling and Compost Facility. The majority of the material would be transported to the proposed facility in long-haul trucks. Incoming material may also be delivered directly by route trucks, transfer long hauls, or commercial haulers from Kern County and other surrounding communities.

Feedstock receipt and composition varies from day to day based on seasonality, market conditions, customer participation, etc. The various types of feedstock materials are typically combined to achieve optimal carbon-nitrogen ratio, moisture levels, and porosity. Best practices for the composition of balanced compost is to combine one- to two- parts green waste per one-part food waste because food waste provides more moisture and green waste provides better porosity. Feedstocks such as wood waste are typically high carbon ingredients, whereas food waste, green waste, biosolids, and manure are high nitrogen ingredients.

**Table 6: Proposed Compost Feedstock**

| | |
|---|---|
| • Class A and B Biosolids<br>• Woody Biomass<br>• Excess Green Matter<br>• Pistachio and Almond Hulls<br>• Grass<br>• Branches<br>• Leaves<br>• Other Plant Matter<br>• Compost and Compost-derived Waste<br>• Anaerobic Digestate | • Winery Pulp<br>• Cannabis/Marijuana Discards<br>• Fats, Oils, and Greases (FOG)<br>• Food<br>• Paper and Cardboard<br>• Poultry Manure and Processing<br>• Material<br>• Cattle/Livestock Manure<br>• Crop Residue |




**Mod. No. 1, CUP No. 1, Map 28; Mod. No. 2, CUP No. 9, Map 28; CUP No. 13, Map 28**

**Figure 8. Radius Map**

**Table 7: Feedstock Definitions for Feedstocks to be Accepted for Composting Under the Proposed Project (No Breakdown Limits)**

| Approved Feedstocks | Description |
|---|---|
| Green Material | Green material includes, but is not limited to, yard trimmings, untreated wood wastes, natural fiber products, and construction and demolition wood waste. Green material does not include food material, biosolids, mixed solid waste, material processes from commingled collection, wood containing lead-based paint or wood preservative, and mixed construction or mixed demolition debris. Sources of green material include commercial and residential sources. |
| Food Material | Any material that was acquired for animal or human consumption is separated from the municipal solid waste stream, and that does not meet the definition of "agricultural material." Food material may include material from food facilities as defined in Health and Safety Code section 113785, grocery stores, institutional cafeterias (such as, prisons, schools and hospitals) or residential food scrap collection. Sources of food material include commercial and residential sources. |
| Manure | Agricultural material and means accumulated herbivore or avian excrement. This includes feces and urine, and any bedding material, spilled feed, or soil that is mixed with feces or urine. |
| Biosolids | The nutrient-rich organic byproduct material resulting from the treatment of sewage sludge and wastewater. |
| Shredded Wood Waste | Material consisting of wood pieces or particles which are generated from the manufacturing or production of wood products, harvesting, processing, or storage of raw wood materials, or construction and demolition activities. |
| ***Total Maximum Daily Intake:*** | ***1,753 tons per day (640,000 tpy/365 days)*** |

### Vehicle Limit

The facility's CUP currently allows waste to arrive at the facility at a rate of 91 trucks per 24-hour period. Truck trips for landfill waste streams would remain unchanged under the proposed project. The project proponent is requesting to increase daily truck trips for the delivery of feedstock materials for composting and removal of finished compost for off-site sale. The composting facility would accept up to 111 trucks per day brining in compostable materials at full build out. Finished compost is proposed to be shipped out at the rate of up to 111 trucks per day at full build out.

The following truck trips counts are proposed for each phase of construction, as shown in Table 8, *Daily Vehicle Traffic Counts*, which will be further analyzed in applicable technical report(s).

**Table 8: Daily Vehicle Traffic Counts**

| Process/Phase | Vehicle Count | Approved/Proposed |
|---|---|---|
| Landfill | 91 | Approved |
| Composting Phase 1 Incoming | 35 | Proposed |
| Composting Phase 2 Incoming | 16 | Proposed |
| Composting Phase 3 Incoming | 60 | Proposed |
| Finished Compost Outgoing (no phasing) | 111 | Proposed |
| ***Total Maximum Vehicle Count at Full Build Out*** | 313 | |

**Finished Compost Product Sold**

At full build out of the compost facility, it is expected that 50 to 111 25-yard truck loads per day of finished material would be removed from the site. A large portion of outgoing finished compost material would be shipped to agricultural customers within Kern County. The facility may occasionally ship finished compost material to customers outside of Kern County, using the same 150-mile radius as is identified in Figure 8, *Radius Map*, for inbound feedstock materials.

### 1.4.1.2 Class III Solid Waste Disposal Landfill

Site A has been used as a landfill facility since 1997 and prior to that the HM Holloway Gypsum Mine. The landfill is a Class III non-hazardous industrial waste landfill with a waste containment system made up of: naturally occurring geologic materials that have been conditioned to prevent the migration of waste constituents to groundwater and to convey leachate to the leachate collection sump; a leachate collection and removal system drainage layer consisting of either appropriate selection geologic materials and a geonet/geocushion; and an operations layer designed to protect the leachate collection and removal system. This project proposes the following modifications to the existing landfill facility, which are discussed in detail below:

- Allowance for additional waste streams for acceptance and disposed at the landfill; and
- An extension of the hours of operation to 24 hours a day, 365 days per year.

**Waste Streams for Landfill**

The project proponent is requesting to modify the CUP to allow an increase in the allowable waste streams for disposal in the landfill as shown in Table 9, *Currently Allowed and Proposed Landfill Waste Streams to be Accepted for Disposal Under the Proposed Project (with a Maximum of 1,000 Tons of Organic Material Daily),* below. The CUP currently allows for acceptance of up to a total of 2,000 tons per day, in any combination, of the following waste streams: Class A and B Biosolids, Fly Ash, Treated Auto Shredder Waste, and Lime Filter Cake. Per WDR Order R5-2010-0123, it has been demonstrated that the landfill's site characteristics alone, without a liner, meet the performance goal contained in 27 CCR 20310 and will not impair the beneficial uses of the surface water or groundwater beneath or adjacent to the landfill in accordance with 27 CCR 20260(b)(1).

Incoming materials that are mandated for diversion by CalRecycle regulations would be diverted, as feasible, to either the compost facility or bioenergy facility. The project proponent is not requesting an increase in daily tonnage limits of waste streams coming to the landfill; however, it should be noted the maximum daily tonnage coming to the facility would increase to 3,753 tons per day to accommodate both landfill disposal and composting operations.

**Table 9: Currently Allowed and Proposed Landfill Waste Streams to be Accepted for Disposal Under the Proposed Project (with a Maximum of 1,000 Tons of Organic Material Daily)**

| Allowed Existing Disposal Waste Streams | Proposed Additional Waste Streams for Disposal | |
|---|---|---|
| • Class A and B Biosolids<br>• Treated Auto Shredder Waste<br>• Cogeneration Ash (Fly Ash)<br>• Spent Sand Blast Media<br>• Lime Filter Cake | • Paper and Cardboard<br>• Drywall<br>• Flooring<br>• Roofing Materials<br>• Tile & Windows<br>• Clean Dirt | • Construction and<br>• Demolition (C&D) Wood<br>• Wood Waste<br>• Green Waste<br>• Combination Wood |

**Table 9: Currently Allowed and Proposed Landfill Waste Streams to be Accepted for Disposal Under the Proposed Project (with a Maximum of 1,000 Tons of Organic Material Daily)**

| Allowed Existing Disposal Waste Streams | Proposed Additional Waste Streams for Disposal | |
|---|---|---|
| | • Clay<br>• Silt<br>• Drill Cuttings<br>• Slag<br>• Clean Asphalt<br>• Concrete<br>• Combination Rock<br>• Concrete with Rebar<br>• Gravel<br>• Brick<br>• Asphalt Grindings<br>• Granulated Silica<br>• Shredded Plastic Pipe<br>• Food Waste<br>• Wastewater Sloughing | • Dimensional Lumber<br>• Pistachio Hulls<br>• Almond Hulls<br>• Grass<br>• Branches and Leaves<br>• Other Plant Matter<br>• Excess Compost<br>• Compost-derived Waste<br>• Winery Pulp/Waste<br>• Cannabis Waste<br>• Wastewater Grit<br>• Poultry Waste<br>• Digestates<br>• Sand |

**Ancillary Operations/Facility Operating Hours**

As allowed by CUP 9, Map 28 the facility operates from 6:00 am to 4:00 pm, 7 days a week. Employees are on site 10 hours per day. Within a 24-hour period there are currently 10 employees working at the facility. The project proposes to increase the facility's hours of operation to 24-hours per day, 365 days per year to meet demand and minimize the amount of daytime traffic.

### 1.4.1.3 Waste-to-Energy Biomass Gasification Facility

The Lost Hills Bioenergy I, LLC waste-to-energy biomass gasification (bioenergy) project involves the construction of a renewable power plant, which would primarily utilize woody agricultural wastes as a feedstock, to produce 3 Megawatts (net) of electrical power for export to the grid via the Pacific Gas and Electric Company (PG&E) under the BioMat program (Category 2 – agricultural feedstocks). The proposed site for this project is a 6-acre parcel of land within the HM Holloway facility, located at 14045 Holloway Road, Lost Hills, CA.

**Construction**

Construction of the bioenergy facility would take approximately 11 months to complete and would begin as soon as the environmental process is complete and all permits necessary to construct and operate the facility are obtained. The plant would include a maintenance and utility building, a control building, a motor control center, and a high-voltage switchyard. The bioenergy facility would also require the following systems and structures to be constructed as shown on Figures 7A through 7G, *Bioenergy Facility Site Layout*:

- Instrument & Plant Air
- Firewater and fire protection system
- Water Tank and Plant Water System

- Potable water system and tank
- Safety showers
- Nitrogen storage area
- Natural gas metering and supply
- Storm water drainage
- Process area drains & sump(s)
- Wastewater collection (in-mobile tanks) and reuse area
- Fuel and chemical unloading and storage areas

**Feedstocks**

Feedstocks would accept up to 165 tons per day (tpd) of orchard & vineyard pruning's, woody arbor waste and chipped branches, stumps, and whole trees sourced from agricultural operations and diverted from green waste processing facilities. Some almond and pistachio nut shells could also be included in the feedstock mix. Feedstocks would not contain paints, wood preservatives or toxic materials. As the BioMAT program requires that at least 80 percent of the sourced feedstock is sourced from agricultural operations, it is possible that up to 20 percent of the feedstock could be sourced from non-agricultural sources, including urban wood, forest biomass, urban pruning's, and biosolids. Orchard removal trees are pushed over and allowed to dry in the field for approximately four weeks (to less than 20 percent moisture). After drying, the trees are ground in the field to a three inch minus specifications and the chips are loaded into tractor trailers for transport to the plant. Feedstocks are expected to be sourced in the San Joaquin Valley, within a 100-mile radius of the plant.

**Bio Gasification System Operations**

Lost Hills Bioenergy I, LLC proposes to install a three train down draft gasifier system designed to use agricultural waste as the feedstock. The gasification system converts the agricultural waste into a synthetic gas (syngas) by heating the waste in an oxygen starved vessel (gasifier). The syngas is then combusted to produce thermal energy (hot air) that is used to drive an Organic Rankine Cycle (ORC) generator to produce three (3) MWs of electricity (net). The electricity generated from the system would be delivered to grid through a Power Purchase Agreement (PPA) with PG&E under the BioMat program.

The feedstock would be chipped and screened off-site prior to delivery and would be delivered to the site by self-unloading trailers. The feedstock would be conveyed into the gasification system to create syngas and biochar. The syngas is sent to a Thermal Oxidizer (TO) where it is combusted at approximately 1800 degrees Fahrenheit. The hot flue gas is used to heat a thermal fluid loop used to provide the energy to the Organic Rankine Cycle (ORC) power generation unit. In addition, the hot flue gas is used to preheat process air to the gasifiers.

The ORC utilizes an organic working fluid in a closed and sealed system. Heat transferred from the flue gas, via the heating oil, is used to vaporize the organic working fluid, which drives a turbine connected to a generator. The organic working fluid leaving the turbine is condensed in a bank of air coolers and pumped back to the closed loop. The ORC generator would produce 3 Megawatts (net) of electricity to be fed into the grid under the BIOMAT program.

The biomass remaining from the gasification process exits the system as biochar. The biochar is a carbon rich product that can be used as a soil amendment in the central valley or be used for other sources. The estimated amount biochar is approximately 10% by mass of the input feedstock. A

summary of the bioenergy facility operations is provided in Table 10, *Bioenergy Facility Operations Summary*, below:

**Table 10: Bioenergy Facility Operations Summary**

| Operation | Total Amount |
|---|---|
| Feedstock | 165 tons/day |
| Power Generation (Gross) | 3.9 MW |
| Power Generation (Net) | 3.0 MW |
| Biochar Production | 20 tons/day |

Potable water would be supplied from the existing Holloway shop building adjacent to the site. The remaining water would be provided by Holloway from water supplied by Berrenda Mesa Water District through an agreement with Blackwell Land Co. This water will be delivered to an onsite Raw Water Tank. The Raw Water Tank would maintain the minimum water inventory required for emergency firewater requirements in addition to water required for daily use. Water usage could be further reduced if it is possible to intermittently transfer water from the onsite wastewater sump and/or mobile wastewater tanks to the Raw Water Tank, after filtration. Expected water usage for the facility is provided in Table 11, *Water Usage*, below:

**Table 11: Water Usage**

| Water Usage | Total Amount |
|---|---|
| Safety Shower Testing (Average) | 25 GPD |
| Firewater Pump Testing (Average) | 250 GPD |
| Hose Stations | 375 GPD |
| Biochar Conditioning | 1,835GPD |
| Other | 130 GPD |
| **Total** | **2615 GPD** |
| **Total Acre Ft/Month** | **0.244** |
| **Total Acre ft/year** | **2.93** |

### Facility Operating Hours

The plant would be designed to operate twenty-four hours (24) a day and 365 days a year. The operations of the plant are engineered to provide baseload electricity to the grid. Truck deliveries would be primarily scheduled for dayshift on weekdays.

### Vehicle Limits

The waste-to energy facility would accept up to 12 trucks per day for the delivery of feedstock materials and for the removal of biochar from the facility to be sold off-site.

## 1.5 PROJECT OBJECTIVES

The project proponent has defined the following objectives for the project:

4. Provide regional composting capacity to meet the organic waste diversion requirements enacted by recent California legislation (AB 341, AB 1826, SB 1383 etc.);
5. Allow for the installation of a compost facility using a variety of compostable organic streams with a forced aeration system to increase the efficiency of the composting process;
6. Provide a service area, within approximately one hundred fifty (150) miles of the project site, to improve quality and quantity of finished composting products for use by agriculture and landscaping operators;
7. Increase diversion of organic materials from landfills by providing an approved expanded feedstock list which includes digestates as well as herbivore and avian manure for composting;
8. To divert organic material from landfills and produce high quality compost for the agricultural community and other customers while also reducing GHG emissions by keeping organics out of landfills in accordance with SB 1383;
9. Provide economic benefits to Kern County through employment of local residents and via expansion of operational activities and construction of new processing equipment, which has the potential to create new job opportunities;
10. Continue to comply with San Joaquin Valley Air Pollution Control District's rules and regulations, and changes with those regulations in the future;
11. Facilitate the accomplishment of AB 341, which directs CalRecycle to increase statewide diversion of solid wastes to 75 percent by 2020;
12. Enhance business owners' ability to comply with AB 1826, which requires that as of April 1, 2016, businesses that generate a specified amount of organic waste per week must arrange for recycling services for that organic waste in a specified manner (such as composting) to substantially reduce landfill disposal of food wastes; and
13. Continue to accept waste materials by utilizing exhausted mining space without having to open a new landfill pit.

## 1.6 PROPOSED DISCRETIONARY ACTIONS/REQUIRED APPROVALS

The project may require certain discretionary actions and approvals including, but not limited to, the following:

### 1.6.1 State

- Regional Water Quality Control Board (RWQCB)
  - Waste Discharge Requirements
- California Department of Resources Recycling and Recovery (CalRecycle)
  - Odor Impact Minimization Plan
  - Solid Waste Facility Permit
- California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA)
  - Safety Management Procedures

### 1.6.2 Local

- County of Kern
  - Certification of Environmental Impact Report
  - Adoption of 15091 Findings and 15093 Statement of Overriding Considerations
  - Adoption of Mitigation Monitoring Reporting Program
  - Amendment to Conditional Use Permit
- Kern County Environmental Health Services Department, acting as the Local Enforcement Agency for CalRecycle
  - Solid Waste Facilities Permits
  - Odor Impact Minimization Plan
  - Report of Compost Site Information (RCSI)
- Kern County Environmental Health Services Department, Certified Unified Program Agency (CUPA)
  - Hazardous Materials Business Plan
  - Spill Prevention Control and Countermeasure Plan
- Kern County Public Works - Building and Development- Flood Plain & Survey
  - Plan for the Disposal of Drainage Waters
  - Grading and Building Plans
- Kern County Public Works – Traffic
  - Access Road Design and Encroachment Permit
- Kern County Fire Department
  - Fire Safety Plan
- San Joaquin Valley Air Pollution Control District
  - Fugitive Dust Control Plan
  - Authority to Construct
  - Permit to Operate

# 2.0 KERN COUNTY ENVIRONMENTAL CHECKLIST FORM

## 2.1 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a Potentially Significant Impact, as indicated by the checklist on the following pages.

| | | |
|---|---|---|
| ☒ Aesthetics | ☐ Agriculture/Forestry Resources | ☒ Air Quality |
| ☒ Biological Resources | ☒ Cultural Resources | ☒ Energy |
| ☒ Geology and Soils | ☒ Greenhouse Gas Emissions | ☒ Hazards and Hazardous Materials |
| ☒ Hydrology and Water Quality | ☒ Land Use and Planning | ☒ Mineral Resources |
| ☒ Noise | ☐ Population and Housing | ☒ Public Services |
| ☐ Recreation | ☒ Transportation | ☒ Tribal Cultural Resources |
| ☒ Utilities and Service Systems | ☒ Wildfire | ☒ Mandatory Findings of Significance |

## 2.2 DETERMINATION

On the basis of this initial evaluation:

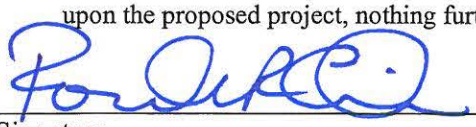
☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☒ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (a) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (b) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENT IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



| | |
|---|---|
| Signature | October 31, 2019<br>Date |
| Ronelle R. Candia<br>Printed Name | Kern County Planning and Natural Resources Dept.<br>For |

# 3.0 EVALUATION OF ENVIRONMENTAL IMPACTS

(1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

(2) All answers must take account of the whole action involved, including offsite as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

(3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

(4) Negative Declaration: "Less than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less-than-Significant Impact." The lead agency must describe the mitigation measure and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).

(5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration, Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

   (a) Earlier Analysis Used. Identify and state where they are available for review.

   (b) Impacts Adequately Addressed. Identify which effects from the above checklist where within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   (c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Incorporated," describe the mitigation measures that were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

(6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

(7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

(8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

(9) The explanation of each issue should identify:

   (a) The significance criteria or threshold, if any, used to evaluate each question; and

   (b) The mitigation measure identified, if any, to reduce the impact to a less-than–significant level.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|---|---|---|---|---|
| **I. AESTHETICS** | | | | |
| Would the project: | | | | |
| a. Have a substantial adverse effect on a scenic vista? | ☐ | ☐ | ☒ | ☐ |
| b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | ☐ | ☐ | ☒ | ☐ |
| c. In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? | ☐ | ☐ | ☒ | ☐ |
| d. Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area? | ☒ | ☐ | ☐ | ☐ |

**RESPONSES:**

a. Much of project site is substantially developed as an existing landfill facility with a truck wash, access roads, overburden storage, and equipment storage. The bioenergy facility would be sited in an already disturbed area on the east side of Holloway Road with office and storage buildings and heavy equipment. While the project site is not designated as a scenic vista, as defined by Kern County or any other local governing body, the incorporation of additional processing equipment to the facility, such as extended aerated static pile composting rows, solar collection, and aeration equipment, and siting of the bioenergy facility would result in alteration to the existing viewshed. However, the entire site is extensively disturbed and considered mostly developed and implementation of the proposed project would not add any substantial effect to the scenic vista. The project area is adjacent to an existing mining operation, a closed County landfill, and vacant open space used for oil production. A large berm along Holloway Road blocks much of the view of the landfill from the traveling public. Therefore, impacts from project implementation are not anticipated to have a substantial adverse effect on a scenic vista; however, impacts will be further analyzed in the EIR.

b. There are no Officially Designated State or County Scenic Highways as defined by the California Department of Transportation (Caltrans), Kern County, or any other local governing body adjacent to or within the vicinity of the project site. Additionally, there are no rock outcroppings or known historic buildings in the vicinity of the project. The entire project site is extensively disturbed and considered mostly developed. Therefore, implementation of the proposed project would not substantially damage scenic resources within a state scenic highway; however, impacts will be further analyzed in the EIR.

c. The project is sited in a nonurbanized area and the existing visual character surrounding the site is predominately rural oil and gas industry, mining activities, and a closed County landfill. There are no designated scenic vistas within the project viewshed. The visual change between the existing landfill and the proposed composting process with the addition of processing equipment, such as aeration system equipment, to the facility may result in alteration to the existing viewshed by increasing the height of existing windrows. However, the entire site is extensively disturbed and considered mostly developed. A large berm along Holloway Road blocks much of the view of the landfill from the traveling public. Therefore, implementation of the project would not substantially degrade the existing visual character of the public's view; however, impacts will be further analyzed in the EIR.

d. The facility currently operates 10 hours a day, seven days a week. The modification to the existing CUPs to add additional compost operations and additional feedstocks would not require additional lighting. However, the proposed addition of a waste-to-energy facility, as well as, extended operating hours of the landfill and compost facility would require additional lighting and may adversely affect nighttime views. Additionally, extensive lighting may violate Kern County's Dark Skies Ordinance. This impact is potentially significant. Further analysis of the projects aesthetic impacts is warranted to determine whether the project will create a substantial new light source and, if so, to determine the reasonable and feasible mitigation measures that could be imposed. Therefore, this potential impact will be further evaluated in the EIR.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|---|---|---|---|---|
| **II. AGRICULTURE AND FOREST RESOURCES** | | | | |
| Would the project: | | | | |
| a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use? | ☐ | ☐ | ☐ | ☒ |
| b. Conflict with existing zoning for agricultural use, or Williamson Act contract? | ☐ | ☐ | ☐ | ☒ |
| c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) or timberland (as defined in Public Resources Code section 4526) or timberland zoned Timberland Production (as defined by Government Code Section 51104 (g))? | ☐ | ☐ | ☐ | ☒ |
| d. Result in the loss of forest land or conversion of forest land to non-forest use? | ☐ | ☐ | ☐ | ☒ |
| e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forest land to non-forest use? | ☐ | ☐ | ☐ | ☒ |
| f. Result in the cancellation of an open space contract made pursuant to the California Land Conservation Act of 1965 or Farmland Security Zone Contract for any parcel of 100 or more acres (Section 15206(b)(3) Public Resources Code? | ☐ | ☐ | ☐ | ☒ |

**RESPONSES:**

a. No lands within or immediately adjacent to the project are identified as "Farmland of Statewide Importance," "Prime Farmland," or "Unique Farmland" by the California Department of Conservation Kern County Important Farmland 2017 map. The site has been continually utilized as a landfill facility since 1997. Due to a lack of farmland on-site, the project does not involve any changes to the existing environment that, due to their location or nature, could result in impacts resulting in the loss of farmland or conversion of farmland to non-agricultural use. No further analysis will be included in the EIR.

b. Lands within or immediately adjacent to the project sites have been previously excluded from Kern County Agricultural Preserve No. 5 and the project sites are not under a Williamson Act Land Use Contract. Site A has been continually utilized as a landfill facility since 1997 and is in the A (Exclusive Agriculture) Zone District, which has a General Plan Map Code of 3.4 (Solid Waste Disposal Facility). Site B is also in the A Zone District and has a General Plan Map Code of 3.4.1 (Solid Waste Disposal Facility Buffer). According to the KCGP Designations and Zone District Consistency Matrix, the "A" Zone District is consistent with Map Codes 3.4 and 3.4.1. The project does not propose additional land disturbance or encroachment into the boundaries of Kern County Agricultural Preserve No. 5. Implementation of the proposed project would not conflict with existing zoning for agricultural use or a Williamson Act contract; therefore, impacts to existing zoning for agricultural uses or a Williamson Act contract are less than significant. No further analysis will be included in the EIR.

c. No lands within or immediately adjacent to the project are zoned forest land or timberland or contain any forested areas. Due to a lack of forest land on-site, the project does not involve any changes to the existing environment that, due to their location or nature, could result in impacts resulting in the loss of forest land or conversion of forest land to non-forest use. Therefore, implementation of the proposed project would have not impact and no further analysis is warranted.

d. No lands within or immediately adjacent to the project are zoned forest land or timberland or contain any forested areas. Due to a lack of forest land on-site, the project does not involve any changes to the existing environment that, due to their location or nature, could result in impacts resulting in the loss of forest land or conversion of forest land to non-forest use. Therefore, implementation of the proposed project would have not impact and no further analysis is warranted.

e. As noted above, the project site and immediate surrounding properties do not contain any forest land or active farming land. The project site is excluded from the Kern County Agricultural Preserve No. 5 boundaries and no parcels within the project site are currently subject to a Williamson Act contract. The project does not propose additional land disturbance or encroachment into the boundaries of Kern County Agricultural Preserve No. 5. Due to a lack of forest land or active farming on-site, the project would not involve any changes to the existing environment that, due to their location or nature, could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use; therefore, no further analysis will be included in the EIR.

f. No lands within the project site are subject to a Williamson Act Land Use contract made pursuant to the California Land Conservation Act of 1965 or Farmland Security Zone contract. Therefore, the project would not result in the cancellation of an open space contract made pursuant to the California Land Conservation Act of 1965 or Farmland Security Zone contract for any parcel of 100 or more acres (Section 15206[b][3] Public Resources Code); therefore, no further analysis will be included in the EIR.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|---|---|---|---|---|
| **III. AIR QUALITY** | | | | |
| he significance criteria established by the applicable Air pollution control district shall be relied upon to make the following determinations. Would the project: | | | | |
| a. Conflict with or obstruct implementation of the applicable air quality plan? | ☒ | ☐ | ☐ | ☐ |
| b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard? Specifically, would implementation of the project (in a specific location) exceed any of the following adopted thresholds: | | | | |
| i. San Joaquin Valley Air Pollution Control District: | ☒ | ☐ | ☐ | ☐ |
| Operational and Area Sources<br>Reactive organic gases (ROG)<br>10 tons per year | ☒ | ☐ | ☐ | ☐ |
| Oxides of nitrogen ($NO_X$)<br>10 tons per year | ☒ | ☐ | ☐ | ☐ |
| Particulate matter ($PM_{10}$)<br>15 tons per year | ☒ | ☐ | ☐ | ☐ |
| Stationary Sources as Determined by District Rules<br>Severe nonattainment<br>25 tons per year | ☒ | ☐ | ☐ | ☐ |
| Extreme nonattainment<br>10 tons per year | ☒ | ☐ | ☐ | ☐ |
| ii. Eastern Kern Air Pollution Control District: | | | | |
| Operational and Area Sources<br>Reactive organic gases (ROG)<br>25 tons per year | ☐ | ☐ | ☒ | ☐ |
| Oxides of nitrogen ($NO_X$)<br>25 tons per year | ☐ | ☐ | ☒ | ☐ |
| Particulate matter ($PM_{10}$)<br>15 tons per year | ☐ | ☐ | ☒ | ☐ |
| Stationary Sources – as Determined by District Rules<br>25 tons per year | ☐ | ☐ | ☒ | ☐ |

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|---|---|---|---|---|
| **III. AIR QUALITY** | | | | |
| c. Expose sensitive receptors to substantial pollutant concentrations? | ☒ | ☐ | ☐ | ☐ |
| d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. | ☒ | ☐ | ☐ | ☐ |

**RESPONSES:**

a. The California Air Resources Board (CARB) has divided California into regional air basins according to topographic drainage features. The San Joaquin Valley Air Pollution Control District (APCD) has jurisdiction in eight counties located in the San Joaquin Valley. The U.S. Environmental Protection Agency (EPA), CARB, and the APCD classify an area as attainment, unclassified, or non-attainment depending on whether or not the monitored ambient air quality data shows compliance, insufficient data available, or non-compliance with the ambient air quality standards. The project site is located within the San Joaquin Valley Air Basin, which is designated as nonattainment (level of a criteria air pollutant is higher than the level allowed by the State standards) for Ozone 1 hour, Ozone 8 hour, PM10 (particulate matter 10 micrometers or less in diameter), and PM2.5 (particulate matter 2.5 micrometers or less in diameter) pollutants under State ambient air quality standards. The air basin is also in non-attainment for Ozone 8 hour and PM2.5 pollutants under Federal ambient air quality standards.

The project includes the construction and operation of a 640,000 tons per year (tpy) composting facility and a 3-megawatt (MW) waste-to-energy biomass plant. Construction and operation of the project may result in exceedance of significance thresholds established by the APCD, CARB, and EPA and result in significant impacts to air quality in the area. These impacts are potentially significant. Further analysis of air quality impacts is warranted to determine whether the project would conflict with or obstruct implementation of the applicable plans for attainment and, if so, to determine the reasonable and feasible mitigation measures that could be imposed. An Air Quality and Greenhouse Gas Analysis is being prepared for the project and potential impacts will be evaluated in the EIR.

b.i.-ii. A cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard could be potentially significant. The San Joaquin Air Basin is a nonattainment area for the Federal and State ozone standards and the State PM10 standard. The SJVAPCD rules and regulations apply to all project activities. The project would occur within the SJVAPCD's jurisdiction, but is not within Eastern Kern Air Pollution Control District's jurisdiction. Operational and cumulative contributions from project implementation could be potentially significant in the San Joaquin Air Basin and will be analyzed in the Air Quality and Greenhouse Gas Analysis in the EIR.

c. Land uses determined to be "sensitive" to air quality include residential areas, schools, convalescent and acute care hospitals, parks and recreational areas, and churches. The nearest residences are located approximately two miles east at Munger Farms, and the unincorporated community of Lost Hills is approximately 3.5 miles to the southeast. Facility construction and operation activities may

result in exhaust emissions from both stationary and non-stationary sources, and dust created from earth-moving work, mixing feedstocks for composting, and biomass gasification that could adversely affect air quality for the workers at the facility and the nearest sensitive receptors. Exposure to Valley Fever from fugitive dust generated during construction is a potentially significant impact. Potential cocci spores could be stirred up during excavation, grading, and earth-moving activities, exposing construction workers to these spores and to the possibility of contracting Valley Fever. While surrounding land uses consist primarily of undeveloped land, there are a few agricultural operations as well as the Lost Hills Oil Field within two miles of the proposed project. Employees of these operations may potentially be exposed to dust and construction related emissions stemming from the proposed project and thus, impacts to sensitive receptors will be further evaluated in the EIR. Impacts will be evaluated in the Air Quality and Greenhouse Gas Analysis in the EIR.

d. The SJVAPCD has screening odor thresholds based on the distance of the odor source within the facility to nearby sensitive receptors and recommends a "case-by-case" analysis of odor impacts, including an evaluation of complaint records for a particular facility as compared to similar facilities. The odors associated with landfill wastes, composting, typical vehicle exhaust of trucks traveling to and from the facility, and maintenance of vehicles on-site may result in substantial odors. The odors associated with facility operations and/or maintenance activities will be evaluated to assess the related impacts to sensitive receptors and this issue will be evaluated in the Air Quality and Greenhouse Gas Analysis in the EIR.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|---|---|---|---|---|
| **IV. BIOLOGICAL RESOURCES** | | | | |
| Would the project: | | | | |
| a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? | ☒ | ☐ | ☐ | ☐ |
| b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? | ☐ | ☐ | ☒ | ☐ |
| c. Have a substantial adverse effect on federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | ☐ | ☐ | ☒ | ☐ |
| d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | ☒ | ☐ | ☐ | ☐ |
| e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | ☐ | ☐ | ☒ | ☐ |
| f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | ☐ | ☐ | ☒ | ☐ |

**RESPONSES:**

a. The project area is located within the geographic range of several Federal- and/or State-listed threatened and/or endangered wildlife taxa, including San Joaquin antelope squirrel (*Ammospermophilus nelsoni*; SJAS), Swainson's hawk (*Buteo swainsoni*; BUSW), western snowy plover (*Charadrius alexandrines nivosus*), giant kangaroo rat (*Dipodomys ingens*; GKR), Tipton kangaroo rat (*Dipodomys nitratoides nitratoides*; TKR), blunt-nosed leopard lizard (*Gambelia sila*; BNLL), Buena Vista Lake ornate shrew (*Sorex ornatus relictus*), and San Joaquin kit fox (*Vulpes macrotis mutica*; SJKF). In addition, the site is in the range of special-status plant taxa, including

California jewelflower (*Caulanthus californicus*), Kern mallow (*Eremalche parryi* ssp. *kernensis*), and San Joaquin woolly-threads (*Monolopia congdonii*). All of the potentially occurring listed plant species are annuals. The project area does not include any streams or wetlands but does have the potential to result in impacts to special-status species. Although impacts to candidate, sensitive, or special-status species is unlikely given the highly disturbed nature of the project site, impacts from project implementation are potentially significant and will be further evaluated in the EIR.

b. Riparian habitats are found along rivers, creeks, streams, and lakes and generally consist of plant communities of woody vegetation. The project and surrounding areas do not have rivers, creeks, streams, and lakes; therefore, riparian habitat will not be impacted due to project implementation. The project would not conflict with existing local or regional conservation plans, or local ordinances protecting biological resources. Impacts from project implementation are anticipated to be less than significant but will be further evaluated in the EIR.

c. The National Wetlands Inventory (NWI) provided by the U.S. Fish and Wildlife Service (USFWS) does not identify any wetlands within the project site. The project area is entirely disturbed and does not propose the direct removal, filling, or hydrological interruption of a Federally protected wetland. Impacts from project implementation are anticipated to be less than significant but will be further evaluated in the EIR.

d. The project is not anticipated to interfere substantially with the movement of any native resident or migratory fish or wildlife species. The project area is entirely disturbed and no established native resident or migratory wildlife corridors or nursery sites exist on-site. However, as stated in Response (a), the project site is located within the geographic range of several Federal- and/or State-listed threatened and/or endangered wildlife taxa that may forage or transverse the site. Impacts from project implementation are potentially significant and will be further evaluated in the EIR.

e. The project would not conflict with local policies or ordinances that protect biological resources. The KCGP incorporates an Oak Tree Conservation component; however, no oak trees are present at the project site. As proposed, the project is not anticipated to conflict with any local policies or ordinances protecting biological resources; however, potential impacts will be further evaluated in the EIR.

f. The proposed project is not situated within the boundaries of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan, or other approved State, regional, or local HCP, including the locally adopted Metropolitan Bakersfield HCP. Therefore, impacts are anticipated to be less than significant; however, further analysis will be presented in the EIR.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|---|---|---|---|---|
| **V. CULTURAL RESOURCES** | | | | |
| Would the project: | | | | |
| a. Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5? | ☐ | ☐ | ☒ | ☐ |
| b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines § 15064.5? | ☐ | ☐ | ☒ | ☐ |
| c. Disturb any human remains, including those interred outside of dedicated cemeteries? | ☐ | ☐ | ☒ | ☐ |

**RESPONSES:**

a. In general, CEQA considers a historical resource as any resource that: (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 lives of persons important in our past; (3) embodies the distinctive characteristic of a type, period, region, or method of construction or represents the work of an important creative individual, or possesses high artistic value; or (4) has yielded, or may be likely to yield, information important in prehistory or history.

The project does not involve the demolition, destruction, relocation, or alteration of historical resources as defined under CEQA. The existing landfill facility has been in operation on the site since 1997 and was historically used for surface mining purposes prior to being a landfill facility. The entire project area is extensively disturbed and considered mostly developed. It is unlikely that any previously recorded cultural or archeological resources will be identified at the site. However, cultural resources and archaeological resources records searches will be conducted at the Southern San Joaquin Valley Information Center (SSJVIC) at California State University, Bakersfield to determine if any such resources have been recorded at the facility or in the vicinity. Mitigation Measures will be identified in the EIR in the event there are any unexpected resources uncovered during the project.

b. No National Register of Historic Places (NRHP) or National Landmark sites exist within, or in proximity to, the project area. No California Register of Historical Resources (CRHR) Sites, California State Historical Landmarks, or Points of Historic Interest exist within, or adjacent to, the project area.

An archaeological artifact, object, or site is considered a unique archaeological resource if "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: (1) contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information; (2) has a special and particular quality such as being the oldest of its type or the best available example of its type; or (3) is directly associated with a scientifically recognized important prehistoric or historic event or person."

Due to the history of disturbance and previous activities at the project site, it is unlikely that intact archaeological resources are present. However, impacts will be further evaluated in the EIR and Mitigation Measures will be identified in the event there are any unexpected resources uncovered during the project.

c. As stated above, due to the history of disturbance and previous activities at the project site, it is unlikely that human remains would be present; however, impacts will be further evaluated in the EIR.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|---|---|---|---|---|
| **VI. ENERGY** | | | | |
| Would the project: | | | | |
| 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? | ☐ | ☐ | ☒ | ☐ |

**RESPONSES:**

a. An Energy Study will be prepared for the proposed project to analyze the consumption of energy related to electricity, fuel, and other related energy sources during construction and operation of the composting and bioenergy facilities. Impacts related to energy use are potentially significant and will be further analyzed and evaluated in the EIR.

b. It is not anticipated that implementation of the project would conflict with or obstruct a State or local plan for energy efficiency. Operation of the project would lead to an overall increase in the County's Renewable Energy Portfolio and would align with the stated KCGP policy to encourage the development of renewable energy within Kern County. Impacts are considered less than significant; however, further analysis is warranted, and this topic will be discussed and analyzed in the EIR.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|---|---|---|---|---|
| **VII. GEOLOGY AND SOILS** | | | | |
| Would the project: | | | | |
| a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| i. Rupture of a known earthquake fault, as delineated on the most recent Alquist Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | ☐ | ☐ | ☒ | ☐ |
| ii. Strong seismic ground shaking? | ☐ | ☐ | ☒ | ☐ |
| iii. Seismic-related ground failure, including liquefaction? | ☒ | ☐ | ☐ | ☐ |
| iv. Landslides? | ☐ | ☐ | ☒ | ☐ |
| b. Result in substantial soil erosion or the loss of topsoil? | ☒ | ☐ | ☐ | ☐ |
| c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? | ☒ | ☐ | ☐ | ☐ |
| d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (19914), creating substantial risks to life or property? | ☒ | ☐ | ☐ | ☐ |
| e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? | ☐ | ☐ | ☒ | ☐ |
| f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. | ☐ | ☐ | ☒ | ☐ |

**RESPONSES:**

a.i. The project site is not located within any earthquake fault zone or seismic hazard zone as established pursuant to the Alquist-Priolo Earthquake Fault Zoning Act. The nearest active fault is the San

Andreas Fault, which is located approximately 22 miles west of the western extent of the proposed project site.

Construction of the project would be subject to all applicable ordinances of the Kern County Building Code (Chapter 17.08). Kern County has adopted the California Building Code (CBC) 2016 Edition (CCR Title 24) effective January 1, 2017, which imposes substantially the same requirements as the International Building Code (IBC), 2015 Edition, with some modifications and amendments. Adherence to all applicable regulations would reduce any potential impacts associated with the project. Impacts from project implementation are expected to be less than significant; however, further analysis in the EIR is warranted.

a.ii. Due to the location of active faults in the general region, strong seismic ground shaking could occur at the project site, resulting in damage to structures that are not properly designed to withstand strong ground shaking. The project would include the construction of a compost and bioenergy gasification facilities, including operation and maintenance buildings, a control building, a motor control center, and a high voltage switchyard. Should strong seismic ground shaking occur at the project site, damage to the composting and bioenergy gasification facilities (and associated structures) could result. However, construction of the project would be subject to all applicable ordinances of the Kern County Building Code (Chapter 17.08) and IBC and CBC earthquake construction standards, including those relating to soil characteristics. Impacts from project implementation are anticipated to be less than significant; however, further analysis in the EIR is warranted.

a.iii. Liquefaction potential occurs when there is a combination of unconsolidated soil type and high groundwater combined with high potential seismic activity. The potential for substantial adverse effects to the project due to seismic-related ground failure, including liquefaction, will be examined in the EIR.

a.iv. The project site is not considered to be a high-risk area for landslides, as it is relatively flat and is not subject to movement of rock, debris, or soil; however, the potential for substantial adverse effects to the project due to landslides will be examined in the EIR.

b-c. The project is located within an area that has been historically used as surface mining land and is developed with established landfill operations. Soil disturbances will occur with the project as movement of vehicles and equipment necessary to conduct project activities could potentially result in the erosion and loss of topsoil. The EIR will examine the composition and baseline stability of the soils that underlie the project site.

d. Expansive soils are fine-grained soils (generally high plasticity clays) that can undergo a significant increase in volume with an increase in water content and a significant decrease in volume with a decrease in water content. Changes in the water content of a highly expansive soil can result in severe distress to structures constructed on or against the soil. The EIR will confirm the presence or absence of expansive soils within the project area.

e. The project site is currently served by an alternative wastewater disposal system. The project would either provide additional wastewater disposal facilities (i.e., septic systems) or portable bathroom facilities to accommodate use by employees located at the bioenergy facility. Implementation of the project is not anticipated to result in any significant impacts. Nevertheless, impacts from these facilities warrant further evaluation in the EIR.

f. Kern County is rich in paleontological resources. If paleontologically sensitive formations are located under the project, ground disturbance could result in potentially significant impacts to paleontological resources. While the landfill site has been completely disturbed, minor ground disturbance will occur during the construction of the bioenergy facility. While impacts are anticipated to be less than significant, further evaluation in the EIR is warranted.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|---|---|---|---|---|
| **VIII. GREENHOUSE GAS EMISSIONS** | | | | |
| Would the project: | | | | |
| a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | ☒ | ☐ | ☐ | ☐ |
| b. Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases? | ☒ | ☐ | ☐ | ☐ |

**RESPONSES:**

a. Greenhouse gas (GHG) emissions emitted by human activity are implicated in global climate change or global warming. The principal GHGs are carbon dioxide ($CO_2$), methane ($CH_4$), nitrogen oxides (NOx), ozone, water vapor, and fluorinated gases. The construction and operation of the eASP composting facility, which would involve use of heavy off-road equipment (for construction and operations), on-road trucks (for deliveries and hauling), and construction worker commute trips, would generate GHGs. However, as a biomass energy facility, the project is expected to displace traditional sources of electricity production, which involve high emission fossil fuel energy sources (e.g., burning coal, fuel oil, natural gas). As such, the provision of clean, renewable energy by the project would produce low-emission electricity that is anticipated to offset GHGs that would otherwise be generated by traditional sources of electricity. Additionally, eASP composting helps keep organic materials out of landfills, subsequently helping reduce the anaerobic breakdown that results in the generation of methane, a GHG. Composting is an aerobic process that can reduce GHG emissions from organic material. The project proposes the use of a solar-powered aeration system applied to the active composting phase of the inbound compost feedstock material to further reduce GHG emissions during the active composting phase. The potential impacts associated with GHG emissions generated during construction of the project and the potential GHG offsets resulting from operation of the project will be further evaluated in the EIR.

b. California has passed several bills and the governor has signed executive orders regarding GHGs. AB 32 (the Global Warming Solutions Act) was passed by the California legislature on August 31, 2006, which requires the State's global warming emissions to be reduced to 1990 levels by 2020. The reduction will be accomplished through an enforceable statewide cap on GHG emissions that was phased in starting in 2012. Additionally, in 2016 SB 1383 was signed into law establishing methane reduction targets in a statewide effort to reduce emissions of short-lived climate pollutants. SB 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025.

In 2002, California established its Renewable Portfolio Standards (RPS) Program, with the goal of increasing the percentage of renewable energy in the State's electricity mix to 20 percent renewable energy by 2017. In 2006, under SB 107, the RPS Program codified the 20 percent goal. The RPS Program required electric utilities and providers to increase procurement from eligible renewable energy resources by at least one percent of their retail sales annually until they reach 20 percent by 2017. On November 17, 2008, the governor signed Executive Order S-14-08, requiring California

utilities to reach the 33 percent renewable goal by 2020. In 2015 SB 350 was enacted to increase the RPS to 50 percent and reduce greenhouse gas emissions by 40 percent by the year 2030.

The project's potential to conflict with any applicable GHG plan, policy, or regulation will be further evaluated in the EIR.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|---|---|---|---|---|
| **IX. HAZARDS AND HAZARDOUS MATERIALS** | | | | |
| Would the project: | | | | |
| a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | ☐ | ☐ | ☒ | ☐ |
| b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | ☐ | ☐ | ☒ | ☐ |
| c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 1/4 mile of an existing or proposed school? | ☐ | ☐ | ☐ | ☒ |
| d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | ☐ | ☐ | ☒ | ☐ |
| e. For a project located within the adopted Kern County Airport Land Use Compatibility Plan, would the project result in a safety hazard or excessive noise for people residing or working in the project area? | ☐ | ☐ | ☒ | ☐ |
| f. Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ☒ | ☐ |
| g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires? | ☐ | ☐ | ☒ | ☐ |
| h. Would implementation of the project generate vectors (flies, mosquitoes, rodents, etc.) or have a component that includes agricultural waste?<br><br>Specifically, would the project exceed the following qualitative threshold:<br><br>The presence of domestic flies, mosquitoes, cockroaches, rodents, and/or any other vectors associated with the project is significant when | | | | |

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|---|---|---|---|---|
| **IX. HAZARDS AND HAZARDOUS MATERIALS** | | | | |
| the applicable enforcement agency determines that any of the vectors: | | | | |
| i. Occur as immature stages and adults in numbers considerably in excess of those found in the surrounding environment; and | ☒ | ☐ | ☐ | ☐ |
| ii. Are associated with design, layout, and management of project operations; and | ☒ | ☐ | ☐ | ☐ |
| iii. Disseminate widely from the property; and | ☒ | ☐ | ☐ | ☐ |
| iv. Cause detrimental effects on the public health or well-being of the majority of the surrounding population. | ☒ | ☐ | ☐ | ☐ |

**RESPONSES:**

a. Site A of the project is a class III, non-hazardous industrial landfill and, therefore, hazardous waste is not accepted for disposal. Site B is an existing maintenance yard and office building. The project would require the transport, storage, and use of fuels and other fluids for fueling/servicing of construction and operation equipment. As an existing landfill, this practice is already in place for current operations. The bioenergy facility would require approximately 10,000 gallons of (19 wt%) aqueous ammonia, to be stored on-site. The ammonia would be delivered to the site via truck and unloaded into the storage tank. Additional materials needed for operation of the bioenergy facility include the Organic Rankine Cycle (ORC) working fluid, heating oil, and Sorbacal SP (a high surface area hydrated lime). Transportation, storage, and disposal/recycling of such products is extensively regulated at the Federal, State, and local levels. Current and future construction activities associated with the project would be required to be in compliance with these regulations. Impacts from project implementation are anticipated to be less than significant; however, this impact will be further evaluated in the EIR.

b. As stated above, as a class III industrial solid waste disposal facility, hazardous waste is not accepted for disposal at the landfill. The facility is not open to the general public and the concentration of hazardous waste inadvertently entering the facility is minimal. Transport of hazardous waste on public roads conforms to all legal requirements, including those of Caltrans, the California Highway Patrol, and the guidelines of the California Department of Toxic Substance Control (DTSC). During project construction and operations, proper management and control measures would be implemented to prevent threats to human health and the environment. The existing landfill operates under the site's Report of Disposal Site Information and Emergency Preparedness Plan, which would be revised to include additional waste streams and composting operations. A separate Emergency Preparedness Plan, as well as a Hazardous Materials Business Plan, if deemed necessary, would be prepared for the bioenergy facility. Impacts from project implementation are anticipated to be less than significant; however, this impact will be further evaluated in the EIR.

c. The project is not located within 0.25 mile of an existing or proposed school. The nearest schools to the project site are Lost Hills Elementary School and A.M Thomas Middle School, located within the Lost Hills Unified School District, approximately 3.5 miles to the southeast of the project site. No new schools are planned to be constructed within a 0.25 mile of the project site. The project would not emit hazardous materials or involve handling hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school; however, this impact will be further evaluated in the EIR.

d. A review of the California Environmental Protection Agency (CalEPA) DTSC's latest list of parcels relating to hazardous wastes pursuant to Section 65962.5 of the California Government Code has been conducted and has determined the project site is not listed; nevertheless, this topic will be further discussed in the EIR.

e. The nearest public airport identified by the Kern County ALUCP is the Lost Hills Airport, located approximately four miles from the proposed project site. The project site is not within the sphere of influence (SOI) of any airport identified by the Kern County ALUCP; however, this impact will be further discussed in the EIR.

f. The project would not interfere with any known existing emergency response plans, emergency vehicle access, or personnel access to the project site. The project site is located in a remote area with two access roads available to access the property in the event of an emergency. Therefore, no impacts related to impairment of the implementation of, or physical interference with, an adopted emergency response plan or emergency evacuation plan are anticipated; nevertheless, impacts will be further evaluated in the EIR.

g. Construction and operation of the proposed project would not result in increased risk of wildfires in the area. The proposed project would comply with all applicable wildland fire management plans and policies established by the California Department of Forestry and Fire Protection (CAL FIRE) and the Kern County Fire Department (KCFD). Accordingly, the proposed project is not expected to expose people or structures to a significant risk of loss, injury, or death involving wildland fires. Impacts are expected to be less than significant; however, further analysis of this issue will be discussed in the EIR.

h.i.-iv. The facility has been in operation since 1997 and currently accepts waste streams that have the potential to generate vectors; such as flies, mosquitoes, and rodents. The addition of feedstocks for landfilling, composting, and bioenergy would introduce the potential to generate additional vectors during the composting process. Vectors at the landfill and compost facility would be managed properly in accordance with CalRecycle regulations (CCR Titles 14 and 27) and enforced by the Local Enforcement Agency through the SWFP. The proposed design, layout, and management methods for the proposed project would be designed to reduce the potential for vector generation. The pre-grinding process, the immediate placement of the organic materials into the windrows, and the high temperature and forced aeration during the active composting phase are natural deterrents to flies and destroy fly larvae, pupae, and eggs. In addition, the aerobic windrow process generally does not attract birds or rodents. However, impacts from the additional proposed waste streams and feedstocks, as well as the composting facility and bioenergy facility, are potentially significant and will be evaluated in the EIR for the potential to generate vectors.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|---|---|---|---|---|
| **X. HYDROLOGY AND WATER QUALITY** | | | | |
| Would the project: | | | | |
| a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? | ☐ | ☐ | ☒ | ☐ |
| b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? | ☒ | ☐ | ☐ | ☐ |
| c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would: | | | | |
| i. result in a substantial erosion or siltation on- or off-site | ☐ | ☐ | ☒ | ☐ |
| ii. substantially increase the rate of amount of surface runoff in a manner which would result in flooding on-or offsite; | ☐ | ☐ | ☒ | ☐ |
| iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or | ☐ | ☐ | ☒ | ☐ |
| iv. impeded or redirect flood flows? | ☐ | ☐ | ☒ | ☐ |
| d. In flood hazard, tsunami, seiche zones, risk release of pollutants due to project inundation? | ☐ | ☐ | ☒ | ☐ |
| e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? | ☒ | ☐ | ☐ | ☐ |

**RESPONSES:**

a. The existing landfill operations are conducted in compliance with the requirements of CCR Titles 14 and 27. Current landfill operations comply with existing WDRs (Order No. R5-2010-0123), adopted and enforced by the RWQCB Central Valley Region. Requirements of the WDRs include implementing best management practices and facility design features to minimize the impacts to groundwater degradation. For the proposed composting operation, activities shall comply with the General Waste Discharge Requirements for Composting Operations (Order No. 2015-0121-DWQ).

Dependent upon agency direction, the project Proponent may apply for individual WDRs for composting operations or incorporate composting operations into the facility's existing WDRs. Composting has a potential to impact groundwater quality; however, the project would incorporate design, construction, and operation requirements to limit impacts to surface and ground water quality.

Currently, there is an extensive environmental monitoring system for the landfill to monitor groundwater quality and control landfill gas associated with landfill operations. There are currently three groundwater monitoring wells associated with Pit "E," four associated with Pit "F," and five associated with Pit "G." The "F & G Connection Area" is covered by wells associated with both Pits "F" and "G." All 12 groundwater monitoring wells are within the 331-acre permitted facility boundary. The landfill's passive gas vent system was upgraded in March 2016 to an active gas collection system, which includes a system to treat, collect, and transport the gas to an off-site processing facility, a solar-powered flare system, and a 55-gallon activated carbon filter canister as a backup for the solar-powered flare system. This upgrade allows HM Holloway to recover landfill gas from the site for a beneficial use. The off-site processing facility converts the methane into beneficial products, such as bio-plastics, through an alternative carbon conversion process.

Due to the design of the bioenergy facility, including the utilization of air coolers, there would be no wastewater generated from the operation of the bioenergy plant itself. Stormwater runoff from the process unit curbed areas, as well as the safety shower, hose stations, and firewater pump runoff would be collected in an on-site retention pond. After testing, the water would either be returned to the water tank for use, pumped out and disposed of, or allowed to evaporate in-situ.

The project's compliance with the above referenced regulations, implementation of facility design features, and impacts on water quality associated with the proposed project are anticipated to be less than significant, but will be further analyzed in the EIR.

b. As an existing landfill, water is used during operations primarily for fugitive dust control. Based on existing water use, the landfill utilizes an average of 40 to 55 acre-feet per year. Water is supplied by Berrenda-Mesa Water District via a purchase agreement with Blackwell Land. This water is typically sourced from the State Water Project and does not generally come from groundwater. Additional tanks are stored as needed during the summer months due to the demand for water in the dry, arid climate conditions. At full build-out, it is anticipated that the project would utilize approximately 20.4 acre-feet of water per month or 245 acre-feet per year. Water would be piped into the site from off-site pumps and pipelines, and will be stored in 100,000-gallon tanks. Water for the composting project and associated dust control is proposed to be provided by a water purchase agreement with Buena Vista Water Storage District, and supplied by Berrenda-Mesa Water District. As with the landfill operation, this water supply generally comes from the State Water Project and is not typically sourced from groundwater. Impacts are potentially significant and will be evaluated in the EIR.

c. The landfill is designed and constructed to comply with CCR Title 27 drainage control requirements. The construction and operation of the composting facility would be in compliance with CCR Titles 14 and 27 and the RWQCB WDRs to minimize drainage impacts and control erosion and surface runoff. The project site is almost entirely disturbed and no surface streams are on or near the site. There are no river tributaries or natural wetlands near the facility. Implementation of the project would not impede or redirect flood flows. Therefore, implementation of the project on existing drainage patters is less than significant; however, further analysis will be included in the EIR.

d. According to the Federal Emergency Management Agency (FEMA) Flood Map Service Center, the project site is located within flood map 06029C1200E, effective September 26, 2008, and shows the project site is in Zone X (area of minimal flood hazard). The project is not located near an ocean or enclosed body of water and would not be subject to inundation by seiche or tsunami. Stormwater

diversion design for existing and planned activities shall meet the RWQCB's requirements. Therefore, impacts from project implementation are anticipated to be less than significant, but will be further analyzed in the EIR.

e. The project site is located within the Berrenda-Mesa Water District and is not in an adjudicated basin. The Berrenda-Mesa Water District has an Agricultural Water Management Program that was updated in 2015. Evaluation of impacts to existing sustainable groundwater management plans are potentially significant and will be further analyzed in the EIR.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|---|---|---|---|---|
| **XI. LAND USE AND PLANNING** | | | | |
| Would the project: | | | | |
| a. Physically divide an established community? | ☐ | ☐ | ☒ | ☐ |
| b. Cause a significant environmental impact due to a conflict with any land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect? | ☒ | ☐ | ☐ | ☐ |

**RESPONSES:**

a. The proposed project is sited in a rural agricultural area with no established community. Surrounding KCGP Designations, Zone Districts, and land use in the area would make it unlikely that a community would be established in the future. Therefore, implementation of the proposed project would not physically divide an established community and no impacts are anticipated to occur; however, further analysis will be conducted in the EIR.

b. The project is within the boundaries of the KCGP and the Kern County Zoning Ordinance. Site A is designated as Map Code 3.4 (Solid Waste Disposal Facility) and land surrounding the landfill is designated Map Code 3.4.1 (Solid Waste Disposal Facility Buffer) and is in the A (Exclusive Agricultural) Zone District. Site B is designated as Map Code 8.4 (Mineral and Petroleum – Min. 5-Acre Parcel)/2.10 (Nearby Waste Facility) and is in the A Zone District. No zone district or land use designation changes are proposed as part of project implementation. The most recent adopted versions of the KCGP and Kern County Zoning Ordinance will be reviewed to determine if implementation of the proposed project is consistent with these plans. The evaluation will be presented in the EIR.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|---|---|---|---|---|
| **XII. MINERAL RESOURCES** | | | | |
| Would the project: | | | | |
| a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | ☒ | ☐ | ☐ | ☐ |
| b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? | ☐ | ☐ | ☒ | ☐ |

**RESPONSES:**

a. The 331-acre Site A is a former surface mine that was converted into a class III non-hazardous industrial waste landfill in 1997. Once mining operations ceased in this area, the mine was reclaimed as a waste processing and disposal site, thus avoiding the need to construct a new landfill and keeping industrial wastes out of the public landfills. In 2008 a separate new CUP was issued to cover landfill operations, and in 2009 the 331-acre landfill site was removed from the boundaries of the existing mining CUP. Surface mining operations are still occurring adjacent to the northern boundary of the landfill site. The proposed compost project would be sited on top of the existing landfill that has reached capacity and would not prohibit mining activities from occurring outside of Site A. Site B, while currently within the boundaries of the mining CUP, has not been excavated or mined. This area is currently used as an equipment maintenance and storage yard and for office buildings. The removal of Site B from the mining CUP is not anticipated to result in the loss of availability of known mineral resources; however, impacts will be further analyzed in the EIR.

b. The project is within the boundaries of the KCGP and the Kern County Zoning Ordinance but is not located within the administrative boundaries of the Bakersfield Production Consumption Region as classified by the State Geologist from "Special Report 210 – Update of Land and Mineral Classification: Aggregate Mineral in the Bakersfield Production-Consumption Region (2009)." However, Site B is within the boundaries of an existing mining operation; therefore, potential impacts will be further analyzed in the EIR.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|---|---|---|---|---|
| **XIII. NOISE** | | | | |
| Would the project result in: | | | | |
| a. Generation of a substantial temporary or permanent increase in the ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies? | ☐ | ☐ | ☒ | ☐ |
| b. Generation of, excessive ground borne vibration or ground borne noise levels? | ☐ | ☐ | ☒ | ☐ |
| c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | ☐ | ☐ | ☒ | ☐ |
| d. For a project located within the Kern County Airport Land Use Compatibility Plan, would the project expose people residing or working in the project area to excessive noise levels? | ☐ | ☐ | ☒ | ☐ |

**RESPONSES:**

a. Land uses determined to be "sensitive" to noise as defined by the KCGP include residential areas, schools, convalescent and acute care hospitals, parks and recreation areas, and churches. The project is sited in a rural area and the landfill has the required designated landfill buffer to prevent encroachment of residential or sensitive receptor development. The nearest residences are located approximately two miles east at Munger Farms, and the unincorporated community of Lost Hills is approximately 3.5 miles to the southeast.

The project site is an operational landfill, adjacent to an active mining operation, and surrounded by other industrial-type land uses. The existing permitted operation utilizes heavy construction equipment to push and compact wastes and to move and maintain soils (e.g., bulldozers, scrapers, water trucks). Heavy truck traffic is a normal part of the permitted activities. There is no record of noise complaints from the surrounding landowners. As required by the KCGP, the project site is surrounded by a designated landfill buffer, which prevents the encroachment of land uses that would be adversely affected by construction and operation noise. The project's potential noise impacts would result from the operation of additional heavy equipment (both for construction and operations) and from additional truck traffic proposed at the facility. Temporary noise impacts are anticipated during the construction of the composting facility and bioenergy facility; however, construction activities would be consistent with the Kern County Noise Element and would not generate construction noise between the hours of 9:00 p.m. and 6:00 a.m. on weekdays. Project construction would not use heavy equipment impact devices and would utilize similar equipment that is already at the site. Therefore, the project is not anticipated to create substantial temporary or permanent increase in noise levels due to the fact the existing project site is an operating sanitary

landfill, surrounded by industrial uses, where heavy equipment operations and truck traffic is already in use; however, further analysis will be included in the EIR.

b. Ground-borne vibration and ground-borne noise would originate from earth movement during the construction phases of the project as well as from operation and maintenance of the various facilities. As mentioned in Response (a), existing landfill operations utilize heavy equipment and heavy equipment and in-bound and out-bound trucks, which create some ground-borne vibration. The project proposes to increase the truck traffic coming to the facility and will include the phased construction of the compost facility and bioenergy plant. The project would be expected to comply with all applicable requirements for long-term operations, as well as measures to reduce excessive ground borne vibration and noise to ensure that the project would not expose persons or structures to excessive ground borne vibration. The project site is surrounded by designated landfill buffer, which prevents the encroachment of land uses that would be adversely affected by vibrations and ground-borne noise caused by construction and operation of the project. Therefore, impacts are anticipated to be less than significant, but will be further analyzed in the EIR.

c. Existing noise levels at the project site (as identified in Responses (a) and (b)) are a result of heavy equipment associated with landfilling activities and heavy-duty trucks bringing material to the landfill for disposal. However, due to existing landfill operations and surrounding mining and industrial uses, it is not anticipated that the continued operation of the existing landfill and construction and operation of a phased compost facility and bioenergy plant will result in a substantial permanent increase in ambient noise levels then what is already existing. However, further analysis will be included in the EIR.

d. Consistent with the analysis of the previously certified Final EIR, the proposed project does not fall within any specific airport sphere of influence identified in the Kern County ALUCP. The closest public airport is the Lost Hills Airport, located approximately four miles to the east. Therefore, impacts are anticipated to be less than significant as a result of the proposed project; however, further analysis will be conducted in the EIR.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|---|---|---|---|---|
| **XIV. POPULATION AND HOUSING** | | | | |
| Would the project: | | | | |
| a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | ☐ | ☐ | ☒ | ☐ |
| b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☒ | ☐ |

**RESPONSES:**

a. Currently, the Holloway Management Group, LLC employs 70 full-time employees combined for the gypsum mining facility and the landfill. The project would provide new employment consistent with the adopted KCGP goals, plans, and policies. It is anticipated that approximately 90 temporary workers would be needed to complete the construction of the project and approximately 20 new full-time employees would be needed to operate the new compost facility and bioenergy plant. It is expected that the construction workforce would commute to the site from various local communities and the number of workers expected to relocate to the surrounding area is not expected to be substantial. Therefore, implementation of the project would not directly or indirectly induce the development of new housing or businesses.

Typical established local thresholds of significance for housing and population growth pursuant to the State CEQA Guidelines, Section 15064.7, include effects that would induce substantial growth or concentration of a population beyond Kern County projections; alter the location, distribution, density, or growth rate of the population beyond that projected in the KCGP Housing Element; result in a substantial increase in demand for additional housing; or create a development that significantly reduces the ability of Kern County to meet housing objectives set forth in the KCGP Housing Element. The effects of the project in relation to these local thresholds are minimal. Therefore, impacts regarding substantial population growth is anticipated to be less than significant, however further analysis will be conducted in the EIR.

b. The proposed project is located on a landfill adjacent to an active gypsum mine with no existing housing on-site. As such, the proposed project would not displace any existing housing such that it would necessitate the construction of replacement housing elsewhere. Therefore, displacement of existing housing is not likely to occur, however further evaluation will be conducted in the EIR.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|---|---|---|---|---|
| **XV. PUBLIC SERVICES** | | | | |
| Would the project: | | | | |
| a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or to other performance objectives for any of the public services: | | | | |
| Fire protection? | ☒ | ☐ | ☐ | ☐ |
| Police protection? | ☐ | ☐ | ☒ | ☐ |
| Schools? | ☐ | ☐ | ☒ | ☐ |
| Parks? | ☐ | ☐ | ☒ | ☐ |
| Other public facilities? | ☐ | ☐ | ☒ | ☐ |

**RESPONSES:**

a. Since the opening of the gypsum mine and landfill, no significant impact has been documented on the available public services for this area. Implementation of the proposed project is not anticipated to require additional public services beyond that which already exists in the area. Existing services are adequate to serve the proposed project and would not result in altering and creating new governmental and public services.

The KCFD provides fire suppression and medical emergency services currently to the project. The nearest fire station to the project site is Station 26 located at 14670 Lost Hills Road, approximately 4.5 miles southeast of the site. The KCFD will review the proposed composting facility and bioenergy plant plans and determined the facility layout and design provides adequate emergency access and availability of fire water to support the extinguishment of a fire. Implementation of the project's construction and operational activities may result in an increased risk of fire, which could impact firefighting capacity in the area. Therefore, potential impacts are potentially significant and will be further evaluated in the EIR.

The Kern County Sheriff Department provides police protection services in the area. The Sheriff's Wasco substation is approximately 27 miles southeast of the project site. Although the potential is low, the project may attract vandals and the project would result in increased traffic volumes in the project area that could increase demand on law enforcement services. Impacts to sheriff services are considered to be less than significant but will be further evaluated in the EIR.

The project is not located within 0.25 mile of an existing or proposed school. The nearest schools to the project site are Lost Hills Elementary School and A.M Thomas Middle School, located within

the Lost Hills Unified School District, approximately 3.5 miles to the southeast of the project site. It is anticipated that approximately 90 temporary workers would be needed to complete the construction of the project and approximately 20 new full-time employees would be needed to operate the new compost facility and bioenergy plant. It is expected that the construction workforce would commute to the site from various local communities and the number of workers expected to relocate to the surrounding area is not expected to be substantial. Therefore, implementation of the proposed project is not anticipated to have a significant increase in the number of users at local schools; however, it will be further evaluated in the EIR.

Implementation of the project is expected to have less than significant impacts on parks and other public facilities, such as post office and/or library services. However, due to the increase in temporary construction workers and new full-time employees as part of the project, potential impacts will be further evaluated in the EIR.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|---|---|---|---|---|
| **XVI. RECREATION** | | | | |
| Would the project: | | | | |
| a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | ☐ | ☐ | ☐ | ☒ |
| b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | ☐ | ☐ | ☐ | ☒ |

**RESPONSES:**

a-b. The project does not include new recreational facilities and would not appreciably increase demands on existing facilities. The average daily workforce during construction is expected to consist of approximately 90 personnel. The temporary increase in use of recreation facilities during construction that might be caused by an influx of workers would be minimal. The project would require employees for operation and maintenance activities but would likely be drawn from the local labor force and would commute from their existing permanent residences to the project site during those times. However, even if the full-time employees were hired from out of the area and relocated to eastern Kern County, the resulting addition of families to this area would not result in a substantial increase in the number of users at local parks. As a result, there would not be a detectable increase in the use of parks or other recreational facilities. Impacts are not anticipated to occur, and further analysis is not warranted in the EIR.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|---|---|---|---|---|
| **XVII. TRANSPORTATION AND TRAFFIC** | | | | |
| Would the project: | | | | |
| a. Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? | ☒ | ☐ | ☐ | ☐ |
| b. Conflict or be inconsistent with CEQA Guidelines § 15064.3 (b) | ☒ | ☐ | ☐ | ☐ |
| c. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | ☐ | ☐ | ☒ | ☐ |
| d. Result in inadequate emergency access? | ☐ | ☐ | ☒ | ☐ |

**RESPONSES:**

a. The project site can be accessed from various routes. Trucks utilize I-5 to SR-46 to access Holloway Road from the south and I-5 to Twisselman Road to access Holloway Road from the north. Trucks traveling from coastal areas utilize US 101 to SR-46 from the west. Due to the rural nature of the project site, no bus stops or designated bicycle lanes exist on the roadways likely to be used during construction and operation of the project. The project does propose an increase in traffic and would result in an increase of vehicle miles traveled. Impacts are potentially significant. A traffic impact study will be prepared and the EIR will analyze the project for consistency with state and local guidance.

b. The project is located in unincorporated Kern County. Construction and operation of the project would result in an increase in truck traffic at the site; therefore, it is anticipated that the project may exceed any level of service (LOS) standard established by the Kern County Congestion Management Plan for designated roads or highways. Implementation of the proposed project would generate traffic on the existing roadway network. As such, impacts are considered potentially significant. This impact will be discussed and analyzed in the EIR.

c. The existing roadways in the project area are already utilized by large tractor-trailer trucks for mining, landfill, and oil field operations. The project does not propose a change in traffic patterns or traffic volumes, and therefore would not increase hazards due to a geometric design feature (sharp curves or dangerous intersections) or conflict with existing and compatible uses (farm equipment and service vehicles). Impacts are anticipated to be less than significant; however, impacts will be further analyzed in the EIR.

d. The project would not alter or block any existing emergency access routes, nor change existing patterns of emergency access. No changes in traffic patterns are proposed. The project would not result in inadequate emergency access. Therefore, impacts from project implementation are less than significant; however, impacts will be further analyzed in the EIR.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|---|---|---|---|---|
| **XVIII. TRIBAL CULTURAL RESOURCES** | | | | |
| Would the project: | | | | |
| a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: | | | | |
| i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources defined in Public Resources Code §5020.1 (k) or | ☒ | ☐ | ☐ | ☐ |
| ii. A recourse determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code §5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code §5024.1, the lead agency shall consider the significance of the resource to a California Native America tribe. | ☒ | ☐ | ☐ | ☐ |

**RESPONSES:**

a.i.-ii. The proposed project could potentially impact tribal cultural resources. All tribes with possible cultural affiliation and that have expressed, in writing, their interest in project located within the project area will be notified, per AB 52. Further evaluation in the EIR is warranted to identify potential impacts to tribal cultural resources and to formulate avoidance and mitigation measures, if applicable.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|---|---|---|---|---|
| **XIX. UTILITIES AND SERVICE SYSTEMS** | | | | |
| Would the project: | | | | |
| a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? | ☒ | ☐ | ☐ | ☐ |
| b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? | ☒ | ☐ | ☐ | ☐ |
| c. Result in a determination by the waste water treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | ☐ | ☐ | ☒ | ☐ |
| d. Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? | ☐ | ☐ | ☒ | ☐ |
| e. Comply with federal, State, and local management and reduction statutes and regulations related to solid waste | ☐ | ☐ | ☒ | ☐ |

**RESPONSES:**

a. It is not anticipated that the project would require the relocation or construction of new or expanded wastewater treatment or stormwater drainage, natural gas, or telecommunications facilities. Southern California Gas Company (SoCalGas) has a natural gas main adjacent to the proposed bioenergy plant site. A natural gas line and metering yard would be proposed to supply natural gas to the plant; however, it is not anticipated that SoCalGas would need to provide additional or expanded services to provide natural gas for the project. The proposed compost facility would primarily use solar-generated power to operate and would only have a PG&E electrical connection to use as a backup supply. The bioenergy plant would produce 3 MW (net) of electrical power to feed back into the grid. Water for use as dust control and in landfill activities is piped in from off-site and is generally sourced from surface water from the State Water Project. The addition of composting operations and the bioenergy facility, in addition to existing landfill operations, would increase the quantity of water used at the site. This increase is potentially significant, and impacts will be further evaluated in the EIR.

b. Additional water supply would be needed for both the construction and operation of the compost facility and the bioenergy facility. Beyond what is already being utilized by the existing landfill, it

is anticipated the composting operation would have a water demand of approximately 20.4 acre-feet per month at full buildout and the bioenergy facility would utilize approximately 6,200 gallons per day of water for its operations. A water supply assessment will be completed for the project and further analysis will be discussed in the EIR.

c. It is not anticipated that the project would create significant amounts of wastewater. It is expected that the operation of the compost facility would generate a small amount of wastewater. It is intended that this water, along with any rainfall, be retained on-site. Stormwater runoff from the process unit area of the bioenergy facility, as well as the safety shower, hose stations, and firewater pump runoff from these areas, would be collected in an on-site wastewater sump and stored in mobile water tanks. After testing, the water may be returned to the water tank for reuse, with or without filtration or treatment or disposed of or utilized off-site. Impacts from project implementation are anticipated to be less than significant; however, further analysis will be completed in the EIR.

d. Site A of the project is located within the permitted facility boundary of the existing HM Holloway Landfill. Any residual construction related waste and ongoing solid waste generation resulting from the project would be served by the landfill and diversion operation itself. The estimated date the landfill would reach permitted capacity is 2030. The capacity of the landfill would not be impacted by project implementation. The bioenergy plant would produce approximately 20 tons per day of biochar, two tons per day of feedstock rejects, and 1.5 tons per day of FGD filter cake. Biochar would be tested and characterized in accordance with EPA requirements. The biochar would be utilized as a soil amendment within a 300-mile radius of the plant. Filter cake would also undergo testing and characterization, but it is anticipated the residual could be landfilled safely as non-hazardous waste. Feedstock reject material primarily consists of rocks, dirt, and miscellaneous tramp materials included in the incoming feedstock materials and would be landfilled safely as non-hazardous waste. Impacts from project implementation are anticipated to be less than significant; however, further analysis will be completed in the EIR.

e. The existing landfill is in compliance with applicable Federal, State, and local management and reduction statutes and regulations related to solid waste. H.M. Hollway, Inc is a Class III industrial waste landfill, permitted to operate under the provision of CCR Title 27. The site is identified by CalRecycle as SWIS No. 15-AA-0308. Monthly inspections by the Kern County Public Health Department – Environmental Health Division, acting as the Local Enforcement Agency, ensure that all facility operations operate in accordance with applicable statutes, regulations, and state minimum standards. CalRecycle conducts an 18-month inspection of the landfill along with the Local Enforcement Agency. The proposed project is served by the landfill itself.

In September 2016, Governor Brown signed SB 1383 establishing methane emissions reduction targets in a statewide effort to reduce emissions of short-lived climate pollutants, including methane emissions reductions from organic wastes. SB 1383 established targets to achieve a 50 percent reduction in the level of the statewide disposal of organic wastes (compostable feedstocks, green materials, food material, vegetative food material, etc.) from the 2014 level by 2020 and a 75 percent reduction by 2025. Therefore, the project is a function of the implementation of SB 1383 and serves as an effort to meet State mandates and meet the regional needs for organics handling and processing. Therefore, impacts will be less than significant as a result of the proposed project; however, further analysis will be included in the EIR.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|---|---|---|---|---|
| **XX. WILDFIRE** | | | | |
| If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project: | | | | |
| a. Substantially impair an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ☒ | ☐ |
| b. Due to slope, prevailing winds, or other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? | ☐ | ☐ | ☒ | ☐ |
| c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? | ☒ | ☐ | ☐ | ☐ |
| d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? | ☐ | ☐ | ☒ | ☐ |

**RESPONSES:**

a. The project is not classified as a high fire severity zone and is not anticipated to physically impede the existing emergency response plans, emergency vehicle access, or personnel access to the site. The site is located in a rural, sparsely developed area with limited population. The project site is not located along an identified emergency evacuation route and is not identified in any adopted emergency evaluation plan. Therefore, less-than-significant impacts related to impairment of the implementation of, or physical interference with, an adopted emergency response plan or emergency evacuation plan are anticipated; nevertheless, further analysis will be conducted in the EIR.

b. Given the topography of the project site, it is not anticipated the project would expose project occupants to pollutant concentrations from a wildfire or uncontrolled spread of a wildfire due to slope, prevailing winds, and other factors; nevertheless, further analysis will be conducted in the EIR.

c. The project would require the installation of the additional infrastructure, including power lines and natural gas lines, that may have the potential to exacerbate the fire risk or cause temporary or ongoing impacts to the environment; therefore, further analysis will be included in the EIR.

d. The project site is not considered to be a high-risk area for landslides as it is relatively flat and is not subject to post-fire slope instability or drainage changes that would expose people or structures to significant risks; nevertheless, further analysis will be conducted in the EIR.

| | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|---|---|---|---|---|
| **XXI. MANDATORY FINDINGS OF SIGNIFICANCE** | | | | |
| a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory? | ☒ | ☐ | ☐ | ☐ |
| b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.) | ☒ | ☐ | ☐ | ☐ |
| c. Does the project have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly? | ☒ | ☐ | ☐ | ☐ |

**RESPONSES:**

a. Impacts to biological resources are currently unknown. Biota studies for the project are currently being conducted. The EIR's biological resources section will discuss specific project impacts on plants and wildlife, including avian species, and impacts to cultural and tribal cultural resources. The document will also evaluate the project's contribution of cumulative biological, cultural, and tribal cultural resources impacts and propose mitigation that will reduce potential impacts to less-than-significant levels, where feasible.

b. The project has the potential to cumulative contribute to air quality, GHG emissions, hazards, and traffic impacts. The proposed project may have the potential to affect air quality in the San Joaquin Valley Air Basin, which is currently designated as "non-attainment" for ozone, $PM_{10}$, and $PM_{2.5}$ according to Federal and State standards. An air quality analysis will be presented in the EIR to evaluate the impacts. Additionally, the proposed project has the potential to generate GHG and VOC emissions that may have a significant impact on the environment, either directly or indirectly. The EIR will evaluate the project's contribution to cumulative impacts in these and other resource areas.

c. The project has the potential to result in significant impacts on the environment and on human beings. The EIR will include a comprehensive review of existing conditions and potential project impacts related specifically to air quality, GHG emissions, and hazards and hazardous materials. The EIR will recommend mitigation measures to reduce the level of significance of substantial adverse effects on human beings, either directly or indirectly, along with a summary of findings and feasible mitigation measures.