

Draft
Mitigated Negative Declaration

John Gill School Modernization Project

Lead Agency:
Redwood City School District
750 Bradford Street
Redwood City, CA 95037

April 2019

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School Site Solutions, Inc.

DRAFT

Initial Study and Mitigated Negative Declaration
John Gill Modernization Project

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INTRODUCTION

The Redwood City School District (RCSD) is proposing to modernize the existing John Gill School and construct a new two-story building. The Project Site is located at 555 Avenue Del Ora, Redwood City, CA 94062; north of Avenue Del Ora and west of Jefferson Avenue in San Mateo County, California. The School is surrounded by single family residential units. McKinley Intermediate School is located 0.8 miles northeast of the Site, Red Morton Community Park is located 0.3 miles southeast, and Sequoia Hospital is located 1.4 miles northwest. The Project Site consist of 6.90 acres and is owned by the Redwood City School District; assessor's parcel number 058-161-390. Pursuant to the California Environmental Quality Act (CEQA; *Public Resources Code Section 21000, et seq*. and CEQA Guidelines), RCSD has prepared this Initial Study (IS) to consider the potential environmental impacts that might result from the implementation of the proposed modernization and new construction project.

Redwood City School District is the Lead Agency for CEQA compliance on this project. The proposed Project could potentially qualify for a Notice of Exemption (NOE) since the scope includes minor additions to existing schools, and the addition does not increase the original student capacity by more than 25% or 10 classrooms. However, a Mitigated Negative Declaration (MND) was chosen as the appropriate CEQA compliance document for this project in an abundance of caution. Based on results of the Phase 1 Environmental Site Assessment, the proposed removal of trees, the proposed addition of a two-story classroom, the proposed relocation of drop-off and pick-up zones, and the proposed relocation of the parking area, RCSD has determined that the project scope could potentially result in significant impacts. As a result, a Mitigated Negative Declaration is the appropriate CEQA action for this project.

The John Gill School was originally built in 1932 and modernized in 1998. The school campus currently supports 20 classrooms and 4 portables to serve approximately 437 K-5 grade students. Facilities include 5 classroom buildings, a library, a multi-use building, a private preschool, and two child development centers. Modernization scope of work includes upgrades to technology, fire alarm, security, and door hardware in buildings A, D, & E. The project also includes new construction, where existing buildings B, and C, and portable buildings A1 and A2 will be demolished and replaced by a two-story administration and classroom building. Modifications to the Site will include relocation of drop-off and pick-up zones and relocation of parking areas; the current number of parking spaces, 45, will remain the same upon completion of the Project. Demolition will include removal of buildings B and C, overhead canopies, portable buildings A1 and A2, the existing stairs, and exterior elevator.

INITIAL STUDY FINDINGS

1. **Project Title:** John Gill Modernization Project

2. **Lead Agency Name and Address:**
Redwood City School District
750 Bradford Street
Redwood City, CA 94063

3. **Contact Person and Phone Number:**
Dr. John Baker
(650) 423-2204

4. **Project Location:**
The Project Site is located at 555 Avenue Del Ora, Redwood City, CA 94062, as shown in **Figure 1** through **Figure 3**, **Appendix A**, and **Appendix B**.

5. **Project Sponsor's Name and Address:**
Same as Lead Agency

6. **General Plan Designation:**
Schools

7. **Zoning Designation:**
R-1 (Residential Single Family)

8. Description of Project:

The John Gill School was originally built in 1932 and modernized in 1998. The school campus currently supports 20 permanent classrooms and 4 portable classrooms to serve approximately 437, K-5 grade students. Facilities include five classroom buildings, a library, a multi-use building, a private preschool, and two child development centers. Modernization scope of work includes upgrades to technology, fire alarm, security, and door hardware in buildings A (2-story classroom building), building D, & E (classroom buildings), and expansion of cold food storage in the kitchen of the multiuse building. Energy efficient aspects of the Project include incorporation of sunshade panels and operable windows for passive cooling. The project scope also includes new construction, where existing permanent classroom buildings B, C, and portables A1 and A2 will be demolished and replaced with a two-story administration/classroom building. Heights of the two-story administration/classroom building are 33'-5'' from the kinder play yard, and 22'-11" from the staff parking lot. Approximately 18,250 square feet (SF) of new construction and approximately 5,226 SF of exterior circulation site work are proposed with the Project. Campus masterplan capacity will increase with a net gain of four classrooms to support an additional 100 students. The total classroom count will be twenty-two after completion of the project. A total of eight classrooms will be

demolished and replaced with twelve new classrooms in the new two-story classroom wing; resulting in a Master Plan Capacity of 524.

Modifications to the Site will include relocation of drop-off and pick-up zones and relocation of parking areas; the number of parking spaces will remain the same at 45 spaces. The Project includes site improvements to create a new entrance along Avenue Del Ora with an accessible entry, drop-off and path of travel to adjacent building A, lower lunch quad, multiuse building, and library/media center buildings. Demolition will include removal of classroom buildings B and C, overhead canopies, portable classroom buildings A1 and A2, the existing stairs, and exterior elevator. Two new high/low drinking fountains will be installed at the Project Site per ADA requirements. The high is at 43" and the low (Americans With Disabilities, ADA) is at 36". A total of fifteen restrooms will be constructed at various locations; two restrooms in building A, three restrooms on the first floor of the new Administrative wing, and ten restrooms to be located in various classroom wings. A total of six restrooms will serve as replacement restrooms, the remaining nine restrooms are considered new restrooms.

Operation hours of the school are not expected to change. Current staffing and enrollment numbers are expected remain the same. Presently, kindergarteners and students in grades 1-5 begin class at 8:15 a.m. Kindergarteners are dismissed daily at 1:30 p.m., while students in grades 1-5 are dismissed at 2:30 p.m.; Students in grades 1-5 have early dismissal every Thursday at 1:30 p.m. Students in grades K-2 have morning break and snack from 9:55 to 10:15 a.m.; K-2 lunch and playtime is from 11:45 to 12:40 p.m.; Grades 3-5 morning break and snack is from 10:20 to 10:40 a.m.; and their lunch/recess is from 12:20 to 1:00 p.m.

Construction is estimated to begin in Fall of 2019, dependent on Division of the State Architect approval, with a construction length of approximately eighteen months. Interim housing will be utilized during project activities. A total of ten portables will be located on the lower field of the existing Site.

9. **Surrounding Land Uses and Setting:**
The School is surrounded by residential, single family units. McKinley Intermediate School is located 0.8 miles northeast of the Site, Red Morton Community Park is located 0.3 miles southeast, and Sequoia Hospital is located 1.4 miles northwest.

10. **Other public agencies whose approval is required:**
As a condition for receiving State matching funds for construction of the new facilities, RCSD will obtain site and plan approvals from the California Department of Education (CDE) for modernization and plan approval from the Division of the State Architect (DSA). RCSD would comply with applicable local, state and federal regulations as related to permits needed for project construction and implementation. The District adopted Resolution No. 13 pertaining to California Government Code Section 53094 which authorized the District to become exempt from non-applicable city or county zoning ordinances. Multiple agencies will be included in the mailing list for review of the

CEQA document by the State Clearinghouse. These agencies include the Air Resource Board (Air Quality), California Highway Patrol (Traffic), Caltrans District #4 (Traffic), Caltrans Planning (Traffic), Department of Conservation (Biological Resources), Department of Education (Schools), Fish and Wildlife Region #3 (Biological Resources), Native American Heritage Commission (Tribal Cultural Resources), Office of Historic Preservation (Cultural Resources), Office of Public School Construction (Schools), Department of Parks and Recreation (Recreation), Regional Water Quality Control Board Area #2 (Hydrology), State Water Resources Control Board (Hydrology), Department of Toxic Substances (Hazards and Hazardous Materials), and the Department of Water Resources (Hydrology).

11. **Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?**

The Redwood City School District sent a Consultation Request Form to the Native American Heritage Commission (NAHC) on July 17, 2017 requesting CEQA Tribal Consultation List (AB 52) and a Sacred Lands File check. The NAHC responded with a consultation list of tribes within the boundaries of the Site. Five different tribes were listed in the consultation letter and the District mailed tribal notification letter to the corresponding tribes on October 17, 2017. The Districted did not receive requests for consultation. (See Section XVIII. Tribal Cultural Resources).

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:

Environmental Factors Potentially Affected

	1. Aesthetics		2. Agriculture/Forestry Resources		3. Air Quality
	4. Biological Resources		5. Cultural Resources		6. Energy
	7. Geology/Soils		8. Greenhouse Gas Emissions		9. Hazards/Hazardous Materials
	10. Hydrology/Water Quality		11. Land Use/Planning		12. Mineral Resources
	13. Noise		14. Population/Housing		15. Public Services
	16. Recreation		17. Transportation		18. Tribal Cultural Resources
	19. Utilities/ Service Systems		20. Wildfire		21. Mandatory Findings of significance

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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 on effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been address by mitigation measures based on the earlier analysis as described on attached sheets. An Environmental 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.

On behalf of the Redwood City School District:

DONALD DIAS — April 9th 2019
Print Name — Date

Signature — April 9th 2019
Signature — Date

INITIAL STUDY CHECKLIST

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 simple 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 into account of the whole action involved, including off-site as well as on-site, 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 that significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there is 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 measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures form Section XVII, "Earlier Analysis, "maybe cross-referenced".)

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, and 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 were 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 Measures Incorporated, "describe the mitigation measures which 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 reference to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is submitted

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 suggestion 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, to reduce the impact to less than significant.

I. AESTHETICS

I. AESTHETICS— Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) Substantially degrade the existing visual character or quality of the Project Site and its surroundings?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

DISCUSSION: AESTHETICS

The proposed Project would not result in significant adverse impacts to aesthetics. Site plans and Site photos are provided in **Appendix A** and **Appendix B**, respectively.

a) Have a substantial adverse effect on a scenic vista?

Less Than Significant Impact. The Site would not significantly change the current view of the surrounding area to the public. Changes that will be made are upgrades to existing structures and the addition of a new two-story classroom building. Views may be obstructed with the development of the two-story building; however, the view is not considered a scenic vista.

b) Substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. The Site is not located near any designated State Scenic Highway.

c) Substantially degrade the existing visual character or quality of the Project Site and its surroundings?

Less Than Significant Impact. The Site is zoned as R-1 (Residential-Single Family) and designated for Schools. The Project is consistent with the General Plan would not degrade the existing visual character or quality of the site and its surroundings.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less Than Significant Impact. No outdoor lighting that would cause substantial light glare such as stadium lights will be implemented for the Project. Interior lighting is planned for the new 2-story classroom building and 2-story administration building; windows will have shading. All outdoor lighting will be shielded by means of roofing and/or orientation; pole lights will be oriented downward. See Site plans at **Appendix A**.

II. AGRICULTURAL RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland.

II. AGRICULTURE AND FOREST RESOURCES— Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
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 non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion or forest land to non-forest use?				X

DISCUSSION: AGRICULTURAL RESOURCES

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 non-agricultural use?

No Impact. The Site is not located on Prime Farmland, Unique Farmland, or Farmland of Statewide Importance; the Site is located on Urban and Built-Up Land according to the California Department of Conservation map system.

b) Conflict with zoning for agricultural use, or a Williamson Act?

No Impact. The Project would not conflict with existing zoning for agricultural use, or a Williamson Act contract.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. The Site is not located on or near forestlands or timberland of any kind. This is consistent with Redwood City's General Plan.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. This does not apply to the Site since it is not located on or adjacent to forestland.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion or forest land to non-forest use?

No Impact. The Site is not on forestland and will have no impact to forest or farmland use.

III. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

III. AIR QUALITY— Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporation**	**Less Than Significant Impact**	**No Impact**
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			X	
c) Result in 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			X	
d) Expose sensitive receptors to substantial pollutant concentrations?			X	
e) Create objectionable odors affecting a substantial number of people?				X

DISCUSSION: AIR QUALITY

Environmental Setting:
The Bay Area Air Quality Management District (BAAQMD) is the responsible agency for Air Quality in Redwood City, San Mateo County. If a project exceeds the identified significance thresholds on emissions cumulatively, the results are considered significantly adverse to air quality impacts. Criteria Air Pollutants and Precursors examined under the BAAQMD were identified as reactive organic gas (ROG), oxides of nitrogen (NOx), respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less (PM_{10}), and fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less ($PM_{2.5}$).

Organic compounds, such as hydrocarbons, are released when fuels or organic waste material are burned. They are also emitted by consumer products, such as aerosol sprays, and by the evaporation of paints, inks, solvents, and gasoline. Some organic compounds are toxic, including benzene, formaldehyde, and acrolein. Exposure to these compounds poses significant health effects, including cancer risk; chronic diseases of the lungs, liver, and kidneys; and acute eye and respiratory irritation. Organic compounds are significant air pollutants because they react with oxides of nitrogen in the presence of sunlight to form ozone (smog).

Nitrogen oxides are a group of gases that form when nitrogen reacts with oxygen during combustion, especially at high temperatures. These compounds (including nitric oxide and nitrogen dioxide), can contribute significantly to air pollution, especially in cities and areas with high motor vehicle traffic. In the Bay Area, nitrogen dioxide appears as a brown haze. At higher concentrations, nitrogen dioxide can damage sensitive crops, such as beans and tomatoes, and aggravate respiratory problems.

Particulate matter (PM) is a complex pollutant composed of an assortment of tiny airborne particles that vary in size and mass (ultrafine, fine, and coarse), physical state (solid or liquid), chemical composition, toxicity, and how they behave in the atmosphere. These particles originate from a variety of man-made and natural sources, including fossil fuel combustion, refining crude oil, residential wood burning and cooking, wildfires, volcanoes, sea salt, and dust. Because they are so small, these particles can bypass the body's natural defenses and penetrate deep into the lungs, bloodstream, brain and other vital organs, and individual cells. Health studies have shown that exposure to PM can have a wide range of negative health effects, including asthma, chronic bronchitis, impaired lung development in children, heart attack, stroke, and premature death. Residential wood burning is the largest source of PM in the Bay Area during the winter.

California Emissions Estimator Model (CalEEMod) was performed using information for the Project supplied by CAW Architects. CalEEMod is a statewide land use emissions computer model used to quantify potential criteria pollutants and greenhouse gas emissions during construction and operation activities; see **Appendix C**. CalEEMod was calculated using the following information associated with typical construction projects:

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Additional information can be found in **Appendix C** of this document. Results from the CalEEMod examined criteria pollutants of concern for construction and operational impacts caused by the project. Thresholds of significance for construction impacts were measured in tons per year (tpy) through CalEEMod. BAAQMD thresholds for construction impacts were measured in pounds per day; therefore, CalEEMod results were converted to lbs./day to allow for comparison. The BAAQMD thresholds for construction are 54lbs/day of ROG, 54 lbs./day of NOx, 82 lbs./day of PM10, and 54 lbs./day of $PM_{2.5.}$ CalEEMod results for criteria pollutants were well under the thresholds; 4.5lbs/day of ROG, 10.6lbs/day of NOx, 0.5lbs/day of PM10, and 0.5lbs/day of $PM_{2.5}$; see **Table 1** below.

Table 1: CalEEMod Results and BAAQMD Thresholds -Construction

	ROG lbs./day	NOx lbs./day	PM10 lbs./day	PM2.5 lbs./day
Construction Threshold	54.0	54.0	82.0	54.0
Project Construction Impacts	4.5	10.6	0.5	0.5

The proposed Project would result in less than significant air quality impacts during construction activities. Thresholds of significance for operational activities were measured in tpy and conversion was not necessary. The BAAQMD thresholds for operation are 10tpy of ROG, 10tpy of NOx, 15tpy of PM10, and 10tpy of $PM_{2.5}$. Operational activities of the Project would result in less than significant impacts to air quality. Criteria air pollutants were 0.37tpy of ROG, 0.73tpy of NOx, <0.01tpy of PM10, and <0.01tpy of $PM_{2.5}$; see **Table 2** below. Therefore, construction and operational activities of the Project would not substantiate a need for mitigation measures.

Table 2: CalEEMod Results and BAAQMD Thresholds - Operational

	ROG tpy	NOx tpy	PM10 tpy	PM2.5 tpy
Operational Threshold	10.00	10.00	15.00	10.00
Project Operation Impacts	0.37	0.73	<0.01	<0.01

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact. BAAQMD thresholds were maintained. None of the Criteria Air Pollutants or Precursors exceeded the thresholds; ROG, NOx, PM10, and PM2.5 were well under levels for construction and operational thresholds.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less Than Significant Impact. Project construction activities would not create a short-term increase in emissions of pollutants that exceed BAAQMD thresholds. Operational use of the Project Site as a school would not create a significant adverse impact on air quality.

c) Result in 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Less Than Significant Impact. The limited nature of construction activities expected to impact air quality suggest incremental emissions associated with the Project would not be significant. Results from the CalEEMod analysis were well below the BAAQMD thresholds signifying that criteria pollutants and greenhouse gas emissions during construction and operation activities would be less than significant.

d) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. Sensitive receptors, as defined by the Environmental Protection Agency include, but are not limited to, hospitals, schools, daycare facilities, elderly housing and convalescent facilities. These are areas where the occupants are more susceptible to the adverse effects of exposure to toxic chemicals, pesticides, and other pollutants. Project construction activities will be timed to minimize exposure, to the greatest extent feasible. Additionally, results from the CalEEMod analysis were well below the BAAQMD thresholds signifying that criteria pollutants and greenhouse gas emissions during construction and operation activities would be

less than significant.

Activities associated with the soil mitigation plan are discussed in the *IX. Hazards and Hazardous Materials* section of this document and would require mitigation. However, the anticipated duration of construction activities, size of the Site, and the CalEEMod results suggest construction emissions would be less than significant and mitigation measures associated with construction activities are not required.

e) Create objectionable odors affecting a substantial number of people?

No Impact. The BAAQMD CEQA Guidelines classify a project that could create objectionable odors as including any of the following: wastewater treatment plant, sanitary landfill, transfer stations, composting facilities, petroleum refineries, asphalt batch plants, chemical manufacturing, fiberglass manufacturing, rendering plants, coffee roasters, and painting/coating operations including auto body shops. The proposed project does not include any of these uses.

IV. BIOLOGICAL RESOURCES

IV. BIOLOGICAL RESOURCES—Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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 Game or U.S. Fish and Wildlife Service?		X		
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 Game or US Fish and Wildlife Service?				X
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
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 Project Sites?				X
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
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?				X

DISCUSSION: BIOLOGICAL RESOURCES

Environmental Setting:
The Project Site is currently developed land and operates as an existing school site; the ground cover consists of paved and turfed areas. Given its developed state, it is unlikely that special status species inhabit the Site; however, the John Gill school site is located approximately 120 feet south of the Smith Slough. Due to this location, there is potential habitat for Ridgway's rail, a listed species (near-threated bird species), to occur near the project site. A biological survey report was completed on February 13, 2019 by Padre Associates, Inc.; see **Appendix D**. Special-status species were not observed onsite during field surveys, and review of the California Natural Diversity Database (CNDDB) and Biogeographic Information and Observation System did not indicate recorded occurrences of special-status species on or near the Project site. Results from the biological survey report determined that the San Francisco gartersnake (Thamnophis sirtalis tetrataenia) occurs within the Palo Alto USGS 7.5-minute quadrangle and appears within all queries of the quadrangle regardless of project location. However, this species would not occur onsite due to the lack of suitable habitat on the Project Site. Suitable habitat for the San Francisco gartersnake is identified as densely vegetated ponds near an open hillside where they can sun themselves, feed, and find cover in rodent burrows. The U.S. Fish and Wildlife Service (USFWS) species list identified several federally-listed species that could occur within the region of the Project, however, suitable habitat is not present onsite for any of the federally listed species. Analysis of the likelihood of occurrence for each species identified within CNDDB or the USFWS list was conducted for the Project Site on the basis of species ranges, previous observations, contemporary sightings, and presence of suitable habitat elements on the Site. Three sensitive raptors, White-tailed kite (Elanus leucurus), Cooper's hawk (Accipiter cooperii) and sharp-shinned hawk (Accipiter striatus) were identified as having potential to nest within trees onsite. For specific information regarding federally listed species and corresponding habitats, please see Table 1. "Special-Status Species Potentially Occurring in the Vicinity of the John Gill Elementary School Modernization" in the Biological Survey Report at **Appendix D**.

The District plans to remove 38 smaller Eucalyptus trees varying in size and diameter. Therefore, the biological survey report made the following determination regarding tree removal at the Project Site. Trees proposed for removal could provide nesting habitat for birds protected under the MBTA and California Fish and Game Code (FGC). Additionally, trees not proposed for removal but located adjacent to proposed impact areas with high levels of construction disturbance, could affect the breeding success of birds (particularly raptors) protected under the MBTA an California Fish and Game codes (Sections 3503, 3503.5, and 3800). These laws and regulations prohibit the take, possession, or destruction of birds, their nests, or eggs. Disturbance that causes nest abandonment and/or loss of reproductive effort could be considered a "take." The following mitigation measures were recommended:

MM 1) *Migratory Bird Treaty Act*
Tree removal and construction activities shall be scheduled to commence prior to the beginning of nesting activity (March 1) or after fledging (August 15). If this is infeasible, the District shall retain a biologist to conduct pre-construction surveys between March 1 and August 15 in potential nesting habitat to identify nest sites. Surveys should be conducted within one week of

tree removal and the start of construction to identify active nests prior to the initiation of construction activities. If an active raptor nest is observed within 350 feet of the Project Site, the District shall contact California Department of Fish and Wildlife (CDFW) for guidance and/or establish a 350-foot buffer around the nest tree. If a passerine bird nest is observed within 100 feet of the Project Site, the District shall contact CDFW for guidance and/or establish a 100-foot buffer around the nest tree. If construction activities cannot be prohibited within the established buffers until young have fledged, District consultation with CDFW shall be conducted for a reduced buffer zone based on nesting phenology, site conditions, and recommendation(s) of a biological monitor. The District shall prohibit construction activities in the buffer zone until the young have fledged.

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 Game or U.S. Fish and Wildlife Service?

Less Than Significant with Mitigation Incorporated. If bird species exist within the Project area, tree removal would be the only source of species displacement. Tree removal or ground-clearing activities could potentially impact nesting birds that are protected under the federal Migratory Bird Treaty Act (MBTA) of 1918 (16 USC 703-711) and FGC (Sections 3503, 3503.5, and 3800). The laws and regulations prohibit the take, possession, or destruction of birds, their nests, or eggs. Disturbance that causes nest abandonment and/or loss of reproductive effort could be considered a "take". Therefore, any tree removal and/or construction activities occurring within the nesting season (March – August), shall be subject to mitigation measure **MM 1)** *Migratory Bird Treaty Act*.

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 Game or US Fish and Wildlife Service?

No Impact. There are no identified riparian habitats or significant natural communities within the project area; no wetlands or waters of the U.S. were observed within the Site. The John Gill school site is located approximately 120 feet south of the Smith Slough. However, the Biological Survey Report determined that suitable marsh habitat is not on or within one mile of the Project Site. Therefore, sensitive species associated with the Slough are not likely to occur at the Site. Project activities would be confined to the existing school site and would not impact the Smith Slough.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. There were no federally protected wetlands identified or observed within the Project Site; the site is designated as Residential-Single Family within the City's General Plan. Project activities would be subject to the existing school site and would not impact the Smith Slough.

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 Project Sites?

No Impact. As observed during the February 13, 2019, biological site visit, the Site contains highly developed land and does not have suitable habitat to support a wildlife corridor or wildlife nursery site.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less Than Significant Impact. Redwood City has permitting requirements for the removal of local trees. The District plans to remove 38 smaller Eucalyptus trees varying in size and diameter. However, the District adopted Resolution No. 13 on November 9, 2016 pertaining to California Government Code Section 53094 which authorized the District become exempt from city or county zoning ordinances; see **Appendix E**. Therefore, the District can render the local tree ordinances inapplicable to the Project since the Site will be used for educational purposes.

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?

No Impact. The Site is not located within a habitat conservation plan.

V. CULTURAL RESOURCES

V. CULTURAL RESOURCES—Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?			X	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		X		
c) Directly or indirectly destroy a unique paleontological resource or Project Site or unique geologic feature?		X		
d) Disturb any human remains, including those interred outside of formal cemeteries?		X		

DISCUSSION: CULTURAL RESOURCES

Environmental Setting:
For a cultural resource to be considered a historical resource (i.e., eligible for listing in the California Register of Historical Resources), it generally must be 50 years or older. Under the California Environmental Quality Act (CEQA), historical resources can include pre-contact (i.e., Native American) archaeological deposits, historic-period archaeological deposits, historic buildings, and historic districts.

Based on the significance criterion identified above, the proposed Project could result in significant adverse impacts to cultural resources during ground disturbing activities if such activities would cause a substantial adverse change in the significance of a historical or cultural resource. A substantial adverse change in the significance of a historical resource would occur from its demolition, destruction, relocation, or alteration such that the significance of the resource would be materially impaired (CEQA Guidelines Section 15064.5(b)(1)). Mitigation measures shall be incorporated to avoid significant or adverse impacts to archaeological resources, paleontological resources, and impacts to any human remains. In the event that human skeletal remains are encountered, the applicant is required to immediately notify the County Coroner. Upon determination by the County Coroner that the remains are Native American, the coroner shall contact the California Native American Heritage Commission, pursuant to

subdivision (c) of section 7050.5 of the Health and Safety Code and the County Coordinator of Indian affairs. No further disturbance of the site may be made except as authorized by the County Coordinator of Indian Affairs in accordance with the provisions of state law and this chapter. If artifacts are found on the site, a qualified archaeologist shall be contacted along with the County Planning Office. No further disturbance of the artifacts may be made except as authorized by the County Planning Office.

The Redwood City School District sent a Consultation Request Form to the Native American Heritage Commission (NAHC) on July 17, 2017, requesting CEQA Tribal Consultation List (AB 52) and a Sacred Lands File check. The NAHC responded with a consultation list of tribes within the boundaries of the Site. Five different tribes were listed in the consultation letter and the District mailed tribal notification letter to the corresponding tribes on October 17, 2017. The Districted did not receive requests for consultation. (See Section XVIII. Tribal Cultural Resources).

a) Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5?

Less Than Significant Impact. The John Gill School is mentioned as being one of "several new schools" built in the Redwood City's General Plan, Historic Resources, however, it is not listed as "significant". The permanent two-story structure that was built in 1932 does not meet the requirements of code §15064.5 as being a historical resource; therefore, the Project Site is not of historical significance. This is consistent with the Office of Historic Preservation database and the National Register of Historic Places database.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less Than Significant with Mitigation Incorporated. Although no archeological resources are identified within the Site, unidentified archaeological resources could be uncovered during construction. Implementation of the following mitigation measure will ensure that the impact to archaeological resources remains less than significant.

MM 2) *Archaeological Signage*
In accordance with guidelines section 15064.5, the School District will ensure that the following language is included in all construction contracts and permits:

> "If archaeological resources or human remains are accidentally discovered during construction, work will be halted within 50 feet of the find until it can be evaluated by a qualified professional archaeologist. If the find is determined to be significant, appropriate mitigation measures will be formulated and implemented."

MM 3) *Communication of Archaeological Site Deposit Indicators*
All construction personnel involved in site clearing, subsequent grading, and trenching will be informed of the potential for subsurface cultural resource unearthing. Indicators of archaeological site deposits include, but are not limited to the following:

Soil that is darker than the surrounding soils, evidence of fire (ash, fire altered rock and earth, carbon flecks, concentrations of stone, bone and shellfish, artifacts of these materials and animal or human burials.

MM 4) *In the Event of Cultural Resources Discovered*
If cultural resources are encountered during Site grading, or construction activities, all work shall be halted within 50 feet of the discovery and RCSD shall engage a qualified archaeologist to assess and protect the discovery as appropriate. No further soil disturbance shall occur within the 50-foot buffer until the preceding assessment has been completed and the resource has been recovered.

Implementation of mitigation measures **MM 3)** *Communication of Archaeological Site Deposit Indicators* and **MM 4)** *In the Event of Cultural Resources Discovered* would reduce potential impacts to archeological and cultural resources to a less than significant level by providing procedures specifically designed to ensure limited disturbance and proper handling in the event of unanticipated or accidental discovery.

c) Directly or indirectly destroy a unique paleontological resource or Project Site or unique geologic feature?

Less Than Significant with Mitigation Incorporated. There are no paleontological resources or unique geologic features identified or observed within the Site. However, construction work would result in ground-disturbing activities that could potentially reveal buried or otherwise obscured paleontological deposits. If any deposits exist, ground-disturbing activities could result in the significant loss of integrity of the deposits and the loss of information. To ensure that any subsurface paleontological resources are not adversely affected, the following mitigation measure shall be implemented:

MM 5) *Paleontological Construction Contracts and Permits Language*
Due to the possibility that significant buried paleontological resources may be found during construction activities, the Redwood City School District will ensure that the following language is included in all construction contracts and permits:

"If paleontological resources are encountered during subsurface construction activities, all work within 50 feet of the discovery will be redirected until a qualified paleontologist can evaluate the finds and make recommendations. If the paleontological resources are found to be significant, they will be avoided by project construction activities and recovered by a qualified paleontologist. Upon completion of the recovery, a paleontological assessment will be conducted by a qualified paleontologist to determine if further monitoring for paleontological resources is required. The assessment will include:

I) The results of any geotechnical investigation prepared for the project site;
2) Specific details of construction plans for the project site;
3) Background research; and
4) Limited subsurface investigation within the project site.

If a high potential to encounter paleontological resources is confirmed, a monitoring plan of further project subsurface construction will be prepared in conjunction with this assessment. After project subsurface construction has ended, a report documenting monitoring, methods, findings, and further recommendations regarding paleontological resources will be prepared."

d) Disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant with Mitigation Incorporated. Although there are no known human remains at the project site, it is possible that unknown resources could be encountered during project construction, specifically during ground disturbing activities such as excavating and grading. Development of the project site could uncover human remains, including those that occur outside of formal cemeteries. Therefore, during construction activities, the following mitigation will be implemented:

MM 6) *Policies and Procedures for Inadvertently Discovered Human Remains*
Because site disturbance may adversely impact undocumented human remains or unintentionally discover significant historic or archaeological materials, the following policies and procedures for treatment and disposition of inadvertently discovered human remains or archaeological materials will apply. If human remains are discovered, it is probable they are the remains of Native Americans.

a) If human remains are encountered, these remains would be treated in accordance with Section 7050.5 of the California Health and Safety Code and Section 5097.98 of the Public Resources Code, as appropriate. With these regulations in place, no impact on human remains is anticipated.
b) In the event that known or suspected Native American remains are encountered, or significant historic or archaeological materials are discovered, ground-disturbing activities will be immediately stopped. Examples of significant historic or archaeological materials include, but are not limited to, concentrations of historic artifacts (e.g., bottles, ceramics) or prehistoric artifacts (chipped chert or obsidian, arrow points, ground stone mortars and pestles), culturally altered ash-stained midden soils associated with pre-contact Native American habitation sites, concentrations of fire-altered rock and/or burned or charred organic materials, and historic structure remains such as stone-lined building foundations, wells or privy pits. Ground-disturbing project activities may continue in other areas that are outside the discovery locale.
c) An "exclusion zone" where unauthorized equipment and personnel are not permitted will be established (e.g., taped off) around the discovery area plus a reasonable buffer zone by the Contractor Foreman or authorized representative, or party who made the discovery and initiated these protocols, or if on-site at the time or discovery, by the Monitoring Archaeologist (typically 25-50 ft for single burial or archaeological find).
d) The discovery locale will be secured (e.g., 24-hour surveillance) as directed by the School District if considered prudent to avoid further disturbances.
e) The Contractor, Foreman, authorized representative, or party who made the discovery and initiated these protocols will be responsible for immediately contacting by telephone the parties listed below to report the find and initiate the consultation process for treatment and disposition:

- The Redwood City School District Superintendent, John Baker
  (650) 482-2200
- The Contractor's Point(s) of Contact
- The Coroner of the County of San Mateo (if human remains found)
  (650) 312-5562
- The Native American Heritage Commission (NAHC) in Sacramento
  (916) 373-3710

f) The Coroner has two working days to examine the remains after being notified of the discovery. If the remains are Native American, the Coroner has 24 hours to notify the NAHC.

g) The NAHC is responsible for identifying and immediately notifying the Most Likely Descendant (MLD). (Note: NAHC policy holds that the Native American Monitor will not be designated the MLD.)

h) After notification by the NAHC, the MLD will be granted permission to inspect the discovery site if they so choose.

i) After notification by the NAHC, the MLD may recommend to the Administrator of District Support Services the recommended means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The MLD has 48 hours after accessing the Site to make recommendations to the property owner as specified in Public Resources Code section 5097.98 (a). The recommendation may include the scientific removal and nondestructive or destructive analysis of human remains and items associated with Native American burials.

j) If the MLD recommendation is rejected by the School District the parties will attempt to mediate the disagreement with the NAHC. If mediation fails, then the remains and all associated grave offerings will be reburied with appropriate dignity on the property in a location not subject to further subsurface disturbance.

VI. ENERGY

VI. ENERGY — Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

DISCUSSION: ENERGY

Environmental Setting:
The San Mateo County Energy Efficiency Climate Action Plan (EECAP) provides a path for achieving local energy efficiency by 2020. The EECAP provides technical analysis to demonstrate the impact of the County's policies and programs on GHG emissions. Maintaining the EECAP separately from the General Plan provides flexibility to the County to assess and revisit the effectiveness of EECAP measures and actions toward this element's overall goals and policies. As a stand-alone plan, the EECAP also has the flexibility to integrate near-term opportunities, new technologies, and research. Together, the General Plan and EECAP function as part of the County's toolkit to achieve resilience to climate change and long-term GHG reductions. The County's EECAP follows both the State CEQA Guidelines (Section 15183.5(b)) and the BAAQMD's guidelines by incorporating the standard elements of a Qualified GHG Reduction Strategy into the EECAP.

During construction there would be a temporary consumption of energy resources for the movement of equipment and materials, but the duration would be limited, and the area of construction would be minimal. Compliance with local, state, and federal regulations, which limit engine idling times and require recycling construction debris, would reduce short-term energy demand during the project's construction to the extent feasible and project construction would not result in a wasteful or inefficient use of energy. There are no unusual project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities or use of equipment that would not

conform to current emissions standards and related fuel efficiencies. Furthermore, individual project elements are required to be consistent with City policies and emissions reductions strategies and would not consume energy resources in a wasteful or inefficient manner.

Based on 2017-2018 Pacific Gas and Electric utility bills for the John Gill School, the average energy consumption prior to Project impacts is approximately 46,525 kilowatts (kWh) per year. Estimated energy consumption will be approximately 54,396 kWh per year after project completion. The Project would comply with all Title 24 requirements. Title 24 is a collection of energy standards that addresses energy efficiency of new (and altered) homes and commercial and school buildings. Since 1978, California residents are required to meet the energy efficiency standards contained in Title 24, Part 6 of the California Code of Regulations. Energy efficiency reduces energy costs, increases reliability and availability of electricity, improves building occupant comfort, and reduces impacts to the environment.

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

Less Than Significant Impact. The Project is not expected to cause wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation. Standard construction activities shall be utilized. The operational use of the Site for educational purposes is necessary and would not create any more of an impact than currently produced. Additionally, Site plans have been developed to incorporate energy conservation strategies such as sunshade panels and operable windows for passive cooling; see Site Plans at **Appendix A.**

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

Less Than Significant Impact. Redwood City utilizes solar energy as their renewable energy source and offers programs such as Sunshares to make solar panels and/or electric vehicles more affordable. Incorporation of sunshade panels and operable windows for passive cooling would increase the energy efficiency of the new facilities to be constructed; see Site plans **Appendix A**. Project impacts to energy would be less than significant.

VII. GEOLOGY AND SOILS

VII. GEOLOGY AND SOILS— Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Expose people or structures to 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.			X	
ii) Strong seismic ground shaking?		X		
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?			X	
b) Result in substantial soil erosion or the loss of topsoil?		X		
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-Project Site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?		X		
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?			X	

DISCUSSION: GEOLOGY AND SOILS

Environmental Setting:
A Geotechnical Evaluation and Geologic Hazard Assessment was completed by Ninyo & Moore Geotechnical & Environmental Sciences Consultants on December 11, 2017; see **Appendix F**. The study identified Site soils as gray and brown, moist, medium dense, clayey sand and stiff, sandy fat and lean clay. Bedrock was identified as stiff/hard soil and classified as weak rock. In addition to a geotechnical report, a Geologic and Safety Hazards Evaluation was performed by McCloskey and Consultants in August of 2017; see **Appendix G.**

Construction plans for new buildings at California schools must be submitted to the Division of State Architect (DSA) for review. DSA ensures that construction plans are, at a minimum, in compliance with the 2016 California Building Code (Title 24, California Code of Regulations), which provides for stringent construction requirements on projects in areas of high seismic risk. The project design and construction are required to conform with, or exceed, current best standards for earthquake-resistant construction in accordance with the 2016 California Building Code and with the generally accepted standards of geotechnical practice for seismic design in Northern California. The 2016 California Building Code also requires that a site-specific geotechnical investigation report be prepared by a licensed professional to evaluate geologic and seismic hazards for proposed developments of one or more buildings greater than 4,000 square feet, such as the proposed project. The purpose of a site-specific geotechnical investigation is to identify seismic and geologic conditions and potential geohazards, such as surface fault rupture, ground shaking, liquefaction, differential settlement, lateral spreading, expansive soils, and slope stability, that need to be addressed with specific design approaches and elements. Requirements for the geotechnical investigation are presented in Chapter 16 “Structural Design” and Chapter 18 “Soils and Foundation” of the 2016 California Building Code. In addition, the California Building Code and California Education Code, Section 17212.5, requires school districts to submit geohazard reports for new structures on existing school sites and additions and alterations to existing buildings. A Geologic Hazard Assessment report is required to analyze any geologic condition that is a potential danger to life and property, including, but not limited to, ground shaking, surface rupture, liquefaction, tsunami, and landslides. Geologic Hazard Assessment reports for new buildings at California schools must be submitted to the California Geological Survey agency for review and acceptance, and, subsequently, to the DSA for review.

The Field Act, contained in Education Code Sections 17280-17317 and 80030-81149, adds additional seismic safety requirements for California schools. The Field Act includes requirements for seismic design standards, plan review, construction inspections, and testing, which are overseen by the DSA through plan review, permitting, and inspection of schools under construction.

a.) Expose people or structures to 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.

Less Than Significant Impact. According to the Geological and Safety Hazards Evaluation, there are no Earthquake faults and no Alquist-Priolo Zones located on site. The nearest Earthquake fault is San Andreas Fault, located three miles southwest of the Site; see Geotechnical Evaluation and Geologic Hazard Assessment at Appendix F.

ii.) Strong seismic ground shaking?

Less Than Significant with Mitigation Incorporated. According to the Geological and Safety Hazards Evaluation, the Site is located in a seismically active area and structures on the Site are likely to be subject to moderate ground shaking. Therefore, the following mitigation measure shall be incorporated:

MM 7) *Incorporation of the Geotechnical Evaluation and Geologic Hazard Assessment Recommendations*

The RCSD shall incorporate the geotechnical recommendation for design and construction of the proposed project. This includes earthwork recommendations, seismic design criteria, foundation recommendations, retaining wall, exterior flatwork, concrete, moisture vapor retarder, and surface drainage and site maintenance; see Geotechnical Evaluation and Geologic Hazard Assessment at **Appendix F**.

iii.) Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. According to the geotechnical study, liquefaction, seismic strain softening, dynamic settlement, and other liquefaction-related hazards are not design considerations based on the subsurface conditions encountered at the Site. Therefore, seismic-related ground failure such as liquefaction is considered less than significant; see Geotechnical Evaluation and Geologic Hazard Assessment at Appendix F.

iv.) Landslides?

Less Than Significant Impact. According to results from the Geologic and Safety Hazards Evaluation, the potential for landslides or the failure of natural slopes to impact the Site are low; see Geotechnical Evaluation and Geologic Hazard Assessment at Appendix F.

b.) Result in substantial soil erosion or the loss of topsoil?

Less Than Significant with Mitigation Incorporated. Slopes shall be vegetated or armored to reduce the potential for erosion as stated in Geotechnical Evaluation, and **MM 7)** *Incorporation of the Geotechnical Evaluation and Geologic Hazard Assessment Recommendations* shall be implemented; see Geotechnical Evaluation and Geologic Hazard Assessment at Appendix F.

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?

Less Than Significant Impact. The geotechnical study results determined that the Site is not within a seismic hazard zone for earthquake-induced landslides, liquefaction, dynamic settlement, nor are there records of historic ground effects such as lateral spreading, ground cracking, or sand boils. Therefore, impacts due to location on unstable geologic unit or soils are less than significant; see Geotechnical Evaluation and Geologic Hazard Assessment at Appendix F.

d.) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Less Than Significant with Mitigation Incorporated. Geotechnical evaluation of the Site found the expansion index of the near-surface soil to be 120; characteristics of high expansion. Therefore, the following mitigation measure shall be implemented.

MM 8) *Expansive Soils*
To reduce the potential for differential movement and distress, the recommendations provided in the Geotechnical Evaluation and Geologic Hazard Assessment performed by Ninyo & Moore shall be implemented to improve shrink/swell behavior for remedial grading, foundation embedment depths, and subgrade preparation during project execution; see section 9 of the Geotechnical Evaluation and Geologic Hazard Assessment at **Appendix F**.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

Less Than Significant Impact. The Project would not utilize a septic system or alternative waste water disposal system.

VIII. GREENHOUSE GAS EMISSIONS

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

DISCUSSION: GREENHOUSE GAS EMISSIONS

Environmental Setting:
Climate change refers to change in the Earth's weather patterns, including the rise in temperature due to an increase in heat-trapping Greenhouse Gas Emissions GHGs in the atmosphere. According to the Bay Area Air Quality Management District (BAAQMD 2017), some of the potential effects of increased GHG emissions and the associated climate change may include loss in snow pack (affecting water supply), sea level rise, more frequent extreme weather events, more large forest fires, and more drought years. In addition, climate change may increase electricity demand for cooling, decrease the availability of hydroelectric power, and affect regional air quality and public health.

In 2006, the California State Legislature passed the California Global Warming Solutions Act (Assembly Bill [AB] 32), which requires the California Air Resources Board (CARB) to develop and implement regulatory and market mechanisms that will reduce GHG emissions to 1990 levels by 2020. In 2016, the State Legislature adopted Senate Bill (SB) 32, which requires further reduction of GHG emissions to 40 percent below the 1990 level by 2030. In addition, Executive Order S-3-05 set a GHG reduction goal of 80 percent below 1990 levels by 2050.

The primary GHG emissions of concern are carbon dioxide, methane, and nitrous oxide. Other GHGs of concern include hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, but their contribution to climate change is less than 1 percent of the total GHGs that are well mixed (i.e., that have atmospheric lifetimes long enough to be homogeneously mixed in the troposphere) (Intergovernmental Panel on Climate Change, 2013). Each GHG has a different global warming potential. For instance, methane traps about 21 times more heat per molecule than carbon dioxide. As a result, emissions of GHGs are reported in metric tons of carbon dioxide equivalents (CO2e), where each GHG is weighted by its global warming potential relative to carbon dioxide. Carbon dioxide emissions dominate the GHG inventory in the San

Francisco Bay Area Air Basin, accounting for more than 90 percent of the total CO2e emissions reported.

Given the overwhelming scope of global climate change, it is not anticipated that a single development project would have an individually discernible effect on global climate change. It is more appropriate to conclude that the greenhouse gas emissions generated by the proposed project would combine with emissions across the state, nation, and globe to cumulatively contribute to global climate change. The primary GHG associated with development projects is carbon dioxide, which is directly generated by fuel combustion (vehicle trips, use of natural gas for buildings) and indirectly generated by use of electricity.

The City Council adopted the current Climate Action Plan on Earth Day, April 22, 2013. The Plan is a roadmap to achieving the City's General Plan target of a 15% reduction in greenhouse gas (GHG) emissions below 2005 levels by 2020. The City is now undertaking an update of the plan in order to carry the City through its approaching horizon year of 2020 and to align with State GHG emissions goals for 2030 - a 40% reduction in emissions from 2005 levels. In order to support the City's plans, RCSD has complied with the BAAQMD standards and included energy conservation strategies into project design such as sunshade panels and operable windows for passive cooling.

The BAAQMD analyzes carbon dioxide equivalent (CO_2e) levels for determining non-stationary sources operational-related impacts on the environment. The threshold is set at 1,100 MT/year for operational related activities; construction activities are not evaluated under BAAQMD. The school is considered a non-stationary source since it is a public facility. A brief discussion of each environmental topic is included below.

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact. The operational emission levels were under the threshold limit of 1,100 MT/yr.; CO2 levels for the project were calculated to be 631.7MT/yr. according to CalEEMod results. There is no threshold of significance for construction related activities; therefore, no significant impact is expected for operational-related activities or construction-related activities; see CalEEMod Analysis at **Appendix C**.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact. Results from the CalEEMod estimator showed that Project to be within regulations established for greenhouse gas reduction. Energy efficiency incorporation of Title 24 are consistent with the City's plans for GHG reduction. CalEEMod Analysis can be viewed at **Appendix C**.

IX. HAZARDS AND HAZARDOUS MATERIALS

IX. HAZARDS AND HAZARDOUS MATERIALS— Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?		X		
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?		X		
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?		X		
d) Be located on a Project Site which is included on a list of hazardous materials Project Sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				X
i) Be located within 1,500 feet of a high-pressure pipeline that can pose a safety hazard?			X	

DISCUSSION: HAZARDS AND HAZARDOUS MATERIALS

Environmental Setting:
Results from the Phase 1 Environmental Site Assessment identified the potential for Naturally Occurring Asbestos (NOA) and lead at the Site; see **Appendix H**. A Preliminary Environmental Assessment (PEA) was prepared in March of 2018 to identify techniques and methodology for site sampling and analyses regarding contaminated soil; see **Appendix I**. Department of Toxic Substances Control (DTSC) oversight was requested by the District. However, due to the nature of the project, DTSC oversight was determined to be unnecessary. A Soil Mitigation Plan (SMP) was implemented in place of a Removal Action Workplan; see **Appendix J**.

Soil Mitigation Plan Impacts:
Results from the SMP ruled out lead as a Contaminant of Concern (COC), stating that "the estimated concentration did not exceed the applicable screening levels". NOA was confirmed as a COC along with chlordane, and arsenic. Further testing determined that NOA exceeded the DTSC Schools Unit guidelines % weight detection limit by Transmission Electron Microscopy (TEM). Arsenic concentrations ranging from 2.16 mg/kg to 30.6 mg/kg were detected in at least one sample. Chlordane was detected at a concentration of 1.57mg/kg in select locations.

Arsenic is a naturally-occurring element widely distributed in the earth's crust. In the environment, arsenic is combined with oxygen, chlorine, and sulfur to form inorganic arsenic compounds. Arsenic in animals and plants combines with carbon and hydrogen to form organic arsenic compounds. Organic arsenic compounds have been used as pesticides and herbicides. Technical chlordane (chlordane) belongs to a group of organochlorine pesticides called cyclodiene insecticides. Cyclodiene insecticides were historically used as soil insecticides and for termite control due to their stability in soil and relative stability when exposed to sunlight. Technical chlordane is a mixture of at least 50 compounds including alpha-and gamma-chlordane, and heptachlor; alpha- and gammachlordane. The name asbestos is often used as a general term to identify several types of naturally-occurring fibrous minerals. The six main types of asbestos are chrysotile (most common), crocidolite amosite, asbestiform tremolite, asbestiform actinolite, and asbestiform anthophyllite. The Santa Cruz Mountains contain ultramafic rocks with asbestos that have eroded and resulted in transport and deposition as alluvial sediments. Chrysotile asbestos and the asbestiform actinolite were identified in soils and bedrock at this Site. The identified COCs and associated cleanup goals are summarized in the table below:

Table 3: Proposed Site Cleanup Goals

Compound	Highest Concentration Detected	Goal
Arsenic	30.9 mg/kg	8.0 mg/kg
Chlordane	1.57 mg/kg	0.44 mg/kg
NOA	0.01% weight of soil using TEM	Capping of NOA area

Arsenic and Chlordane shall be removed from the site using excavation techniques outlined in the SMP; approximately 80 cubic yards of soil shall be removed. NOA will be capped to prevent future exposure. Capping may include buildings, hardscape, artificial turf, or clean import fill as outlined in the SMP. The following mitigation measures shall be implemented to prevent and reduce the exposure of NOA-containing soils.

MM 9) *SMP: Remediation and Site Management*
The District shall follow the protocols outlined in the Soil Mitigation Plan (SMP) completed by McCloskey Consultants, Inc. on November 16, 2018. The proposed remediation activities require a licensed contractor to assist the District in the following activities:

Site-specific health and safety worker requirements, pre-field activities, site control, excavation of impacted soil, site grading, capping systems, dust and erosion control, air monitoring, decontamination, field documentation, and confirmation soil sampling.

Due to the involvement of Naturally Occurring Asbestos (NOA), an Asbestos Awareness Training shall be performed for the remedial contractor personnel; see SMP at **Appendix J**.

MM 10) *SMP: Site-Specific Health and Safety Worker Requirements*
District appointed contractors shall be responsible for the health and safety of their own employees and are required to have their own Health and Safety Plan (HSP), and Injury and Illness Prevention Plans (IIPPs) to comply with OSHA. The HSP shall be implemented at the Site, and the contractors can utilize the HSP provided in the SMP, Appendix D, as a template to create their company-specific HSP. Each contractor working at the Site must prepare a health and safety plan that addresses the safety and health hazards during each phase of Site operations that includes the requirements and procedures for employee protection. The plan must be kept on-site during soil removal and loading activities. Prior to conducting work on-site, project management and field staff must be familiar with the contents of the HSP; see SMP at **Appendix J**.

MM 11) *SMP: Pre-Field Activities*
Several pre-field activities shall be required prior to the initiation of Site removal activities. Pre-field activities include permitting, utility clearance, work zone designation, and set up of support zones/staging areas. These pre-field activities shall be performed as outlined in the SMP; see SMP at **Appendix J**.

MM 12) *SMP: Site Control*
Prior to field activities, the Site shall be divided into three zones as per the SMP: an exclusion zone, decontamination zone, and support zone. Within the exclusion zone are individual work zones where contaminated material is being excavated, stockpiled, or loaded. Ingress to and egress from Site will be controlled via locking gates. The excavated soil will be stockpiled at the closest available area on plastic sheeting; see SMP at **Appendix J**.

MM 13) *SMP: Excavation of impacted soil, Site Grading, and Capping System*
The District appointed contractor shall be responsible for assisting the District with excavation/relocation procedures, stockpiling of soil, truck loading procedures, and transportation procedures. Soil excavation activities will remove approximately 80 cubic yards (in-place yardage) of pesticide and metal containing soil. The NOA impacted soil shall be capped with either buildings, hardscape, artificial turf, turf or imported soils. Site grading and the construction of the new school building shall not take place until after the remedial activities; see SMP at **Appendix J**.

MM 14) *SMP: Dust and Erosion Control*
As stated in the SMP, dust control methods and practices will aid in minimization of the generation and spread of possible dust containing asbestos fibers. A water truck or other source of water shall be used to deliver water to the Site for dust control purposes. Air monitoring shall be conducted by a Hazmat Consultant to control dust emissions during Site remedial activities. Further dust control measures are outlined in the SMP and shall be followed; see SMP at **Appendix J**.

MM 15) *SMP: Air Monitoring*
Air monitoring will be performed by a Hazmat Consultant on both on-Site personnel and along the perimeter of the Site to evaluate the effectiveness of the dust control measures at minimizing the release of asbestos fibers. Samples collected for asbestos fiber counts will be submitted to Asbestos TEM Laboratory which is an Environmental Protection Agency – National Institute of Standards for Testing (EPA-NIST) accredited laboratory that maintains proficiency in the American Industrial Hygiene Proficiency Analytical Testing (PAT) Program, and participates in the National Voluntary Laboratory Accreditation Program (NVLAP), for analysis. All sample collection and lab results data will be reviewed by a Certified Industrial Hygienist (within 36 hours of collection) who is familiar with NOA dust monitoring procedures and the exposure limits identified in the SMP. An Air Monitoring and Dust Mitigation Plan are not necessary for the soil excavation activities because the area of work is not greater than 1-acre; see SMP at **Appendix J**.

MM 16) *SMP: Decontamination*
As stated in the SMP, decontamination procedures shall be followed before equipment or personnel exit the exclusion zone as part of general protocols for preventing or reducing the physical transfer of impacted materials from the affected areas. The District appointed contractor shall be responsible for assisting the District with equipment decontamination, track-out controls, and worker decontamination protection; see SMP at **Appendix J**.

MM 17) *SMP: Field Documentation*
A McCloskey Consultant, Inc. (MCI) field engineer shall be present on-site on an as-needed basis during the chemically-affected soil excavation, perimeter dust monitoring, and dust handling activities. This individual shall monitor the soil excavation work, collect confirmation soil samples, perimeter air monitoring and collect stockpile soil samples. As part of this process, a field log shall be utilized to document Site activities. A

scaled site map shall be implemented to document removal areas and confirm sampling locations. Site activities shall be photographed periodically by MCI to document implementation of the removal activities. The photographs shall be made available for inspection by District authorized personnel for the duration of the project and shall be included in the Removal Action Completion Report; see SMP at **Appendix J**.

MM 18) *SMP: Confirmation Soil Sampling*
In accordance with the SMP, confirmation soil samples shall be collected from the bottom and sidewalls of the excavation areas to document adequate removal of COC contaminated soils; see SMP at **Appendix J**.

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less Than Significant with Mitigation Incorporated. According to the SMP, elevated pesticides and metal concentrations identified in shallow soils would be mitigated by excavation. The soil would be off-hauled and disposed of at an appropriately-licensed landfill prior to Site development. Soils containing arsenic and elevated pesticide concentrations should be resampled and tested after excavation and stockpiling to determine appropriate transportation and landfill disposal options. Based on the PEA and SSI sampling results, it is not anticipated that the material is hazardous waste. Mitigation measures **MM 9)** *SMP: Remediation and Site Management*, **MM 13)** *SMP: Excavation of impacted soil, Site Grading, and Capping System,* and **MM 18)** *SMP: Confirmation Soil Sampling* shall be implemented achieve a less than significant impact.

Additionally, the SMP specifies that selected contractors will obtain all applicable permits and notifications required for performing soil excavation and off-haul from all appropriate agencies. A USEPA identification number would need to be obtained for the Site if stockpile sampling identifies hazardous waste concentrations in the soil. This would require off-hauling and disposal at a Class I Hazardous Waste landfill. Based on the concentration detected in the PEA and SSI sampling, this is not anticipated; no significant hazard to the public or environment is expected.

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?

Less Than Significant with Mitigation Incorporated. Based on the concentrations detected in the PEA and information from the SMP, it is not anticipated that the Project would require off-hauling or disposal of Class I hazardous waste. Implementation of mitigation measures **MM 9)** *SMP: Remediation and Site Management*, **MM 10)** *SMP: Site-Specific Health and Safety Worker Requirements*, **MM 11)** *SMP: Pre-Field Activities*, **MM 12)** *SMP: Site Control*, **MM 13)** *SMP: Excavation of impacted soil, Site Grading, and Capping System*, **MM 14)** *SMP: Dust and Erosion Control*, **MM 15)** *SMP: Air Monitoring;* **MM 16)** *Decontamination*, **MM 17)** *SMP: Field Documentation*, and **MM 18)** *SMP: Confirmation Soil Sampling* will ensure that accidents involving the release of hazardous materials into the environment do not occur. The District shall follow procedures outlined in the SMP.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less Than Significant with Mitigation Incorporated. Modernization of the Project Site includes implementation of a SMP and associated mitigation measures **MM 9)** *SMP: Remediation and Site Management*, **MM 10)** *SMP: Site-Specific Health and Safety Worker Requirements*, **MM 11)** *SMP: Pre-Field Activities*, **MM 12)** *SMP: Site Control*, **MM 13)** *SMP: Excavation of impacted soil, Site Grading, and Capping System*, **MM 14)** *SMP: Dust and Erosion Control*, **MM 15)** *SMP: Air Monitoring;* **MM 16)** *Decontamination*, **MM 17)** *SMP: Field Documentation*, and **MM 18)** *SMP: Confirmation Soil Sampling* will ensure that the project does not create a significant hazard to the public or the environment.

d) Be located on a Project Site which is included on a list of hazardous materials Project Sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. According to the Geological and Safety Hazards Evaluation, the Site is not listed by the State Water Resources Control Board or the California Department of Toxic Substances Control.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

No Impact. There are no airports located within two nautical miles of the Site; the closest airport is San Carlos Airport approximately 4.4 miles northwest of the Site. This is consistent with the *California Code of Regulations, Title 21*, Division 25, Chapter 2.1; *Education Code* Section 17215 and School Facilities Planning Division (SFPD) 4.01. The closest airport is San Carlos Airport approximately 4.4 miles northwest of the Site.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

No Impact. No expansion of property or land acquisition is associated with this project; The Project Site is not located within the vicinity of a public airport or a private airstrip. The closest airport is San Carlos Airport approximately 4.4 miles northwest of the Site.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact. The project does not interfere with any adopted emergency response plans or emergency evacuation plans. Results from the TIS determined that Project circulation and design would allow for adequate passage of emergency vehicles; see TSI at **Appendix L**. The Site has been utilized as a school since the 1930's and will continue to operate in this capacity.

h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

No Impact. No impact, the Site is not located on or adjacent to a wildland.

i) Be located within 1,500 feet of a high-pressure pipeline that can pose a safety hazard?

Less Than Significant Impact. No natural gas transmission or hazardous liquid pipelines were identified within a quarter mile of the Site according to the Geologic and Safety Hazards Evaluation. However, there are several 12-inch diameter water mains owned by the Redwood City Department of Public Works. Water pipeline locations include the western side of the right-of-way for Madison Avenue (595 ft. southeast), Red Morton Park which is northeast of the Nevada Street termination (1,050 ft. southeast), the western side of James Ave. (805 ft. northwest), and the southern side of Myrtle Ave. northwest of James Ave. (910 ft. northwest). In addition, the SFPUC (San Francisco Public Utilities Commission) Hetch-Hetchy water pipeline easement is 60 ft. wide and located beneath the Avenue Del Ora right-of-way and John Gill School parking lot; it includes three 5-ft diameter water pipelines. A Water Pipeline Hazard Assessment was completed on December 13, 2017 by Placeworks, see **Appendix K**. The assessment concluded that a potential break in any of the water pipelines located within 1,500 feet of the site would not result in significant flooding at the Project Site.

X. HYDROLOGY AND WATER QUALITY

X. HYDROLOGY AND WATER QUALITY— Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?		X		
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			X	
c) Substantially alter the existing drainage pattern of the Project Site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-Project Site?			X	
d) Substantially alter the existing drainage pattern of the Project Site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-Project Site?			X	
e) 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?			X	

X. HYDROLOGY AND WATER QUALITY— Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
f) Otherwise substantially degrade water quality?		X		
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?			X	
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?			X	
j) Inundation by seiche, tsunami, or mudflow?				X

DISCUSSION: HYDROLOGY AND WATER QUALITY

a) Violate any water quality standards or waste discharge requirements?

Less Than Significant with Mitigation Incorporated. The project would be subject to the requirements of the Clean Water Act, including the National Pollutant Discharge Elimination System (NPDES) permit. The purpose of the Stormwater Pollution Prevention Plan (SWPPP) is to (1) identify the sources of sediment and other pollutants that could affect the quality of stormwater discharges, and (2) describe and ensure the implementation of Best Management Practices (BMPs) to reduce or eliminate discharges of sediment and other pollutants in stormwater as well as non-stormwater discharges resulting from construction activity. The following mitigation measure would ensure the project does not violate any water quality standards or waste discharge requirement.

MM 19) *Stormwater Pollution Prevention Plan*
The District shall obtain discharge authorization under an appropriate National Pollutant Discharge Elimination System (NPDES) and shall ensure implementation of a Stormwater Pollution Prevention Plan (SWPPP) to abide by water quality standards and waste discharge requirements.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

Less Than Significant Impact. Water is currently conveyed to the Site by the City of Redwood City. The Project is not expected to have a significant effect on the underlying aquifer; the Site does not use groundwater.

c) Substantially alter the existing drainage pattern of the Project Site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-Project Site?

Less Than Significant Impact. Currently the site is operational as an existing school site and does not alter the course of streams or rivers; there are no complications with erosion and siltation that result in flooding on- or off-site. No new drainage is planned for the site.

d) Substantially alter the existing drainage pattern of the Project Site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-Project Site?

Less Than Significant Impact. Currently the site is operational and does not alter the course of streams or rivers; there are no complications with surface runoff that result in flooding on- or off-site. No new drainage is planned for the site.

e) 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?

Less Than Significant Impact. The project is consistent with the San Mateo County Clean Waster Ordinance and would not exceed the capacity of existing stormwater drainage systems. Approximately 80% of all run off from impervious surfaces is captured to meet local San Mateo County Clean Water C.3 Ordinance; see sheet C7.3 and architectural site plan A0.05 in the attached **Appendix A**. This percentage of storm run off at impacted areas (new buildings, paving etc.) is collected and held on site through a series of filtration basins which are C3 approved. Once through the basin, the water is directed to existing storm water system.

f) Otherwise substantially degrade water quality?

Less Than Significant with Mitigation Incorporated. The Projects is not expected to substantially degrade water quality. Implementation of mitigation measure **MM 19)** *Stormwater Pollution Prevention Plan* would ensure water quality standards and waste discharge requirements are met.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

No Impact. The Project does not include any housing; therefore, no impact to housing placed within a 100-year flood hazard; see Site Plans at **Appendix A**.

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

Less Than Significant Impact. According to the Geologic and Safety Hazards Evaluation, the Project Site is not within a 100-year flood hazard area; see CDE/CCR Title 5 Geologic and Safety Hazards Evaluation at **Appendix G.**

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

Less Than Significant Impact. The Project Site was identified as being located outside inundated areas. According to the Geologic and Safety Hazards Evaluation, the inundation zone for Emerald Lake adjoins north and east of the Site, approximately 200 to 400 feet away; see CDE/CCR Title 5 Geologic and Safety Hazards Evaluation at **Appendix G.**

j) Inundation by seiche, tsunami, or mudflow?

No Impact. According to the Geologic and Safety Hazards Evaluation, the Project Site is not susceptible to seiche, tsunami, or mudflow; these hazards are considered nil due to the inland location of the site; see CDE/CCR Title 5 Geologic and Safety Hazards Evaluation at **Appendix G.**

XI. LAND USE AND PLANNING

XI. LAND USE AND PLANNING— Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Physically divide an established community?			X	
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			X	
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?			X	

DISCUSSION: LAND USE AND PLANNING

Environmental Setting:
As discussed in the Initial Study Findings of this document, subsection 6 and 7, the project is located within the Residential Single Family Zone R-1 with a land use designation of Schools. According to the City's General Plan: Urban Form and Land Use, page BE – 41, public schools are a permitted use within the residential land use categories. The project would be consistent with all applicable plans, policies or regulations that have been adopted by local, county, regional, state or federal agencies with jurisdiction over this project for the purpose of avoiding or mitigating environmental effects. On November 9, 2016, the District adopted Resolution No. 13 pertaining to California Government Code Section 53094 which authorized the District to implement an exemption from city or county zoning ordinances; see **Appendix E**.

a) Physically divide an established community?

Less Than Significant Impact. The Project Site has been an established part of the community operating as a school site since the 1930's and would not divide the existing community.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Less Than Significant Impact. The Site is designated for schools as per the City's General Plan and continued use of the Site for educational purposes would not conflict with any land use plans. The Project is consistent with the Redwood City General Plan and would continue to

support policies such as BE –8.2 by promoting connections to schools, trails, and parks. The RCSD implements Safe Routes to School which is a program that aims to make commutes safer for students to get to school and encourages walking and biking where safety is not a barrier.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

Less Than Significant Impact. The Site is intended for continued educational use and does not conflict with any conservation plan, natural community conservation plan, General Plan, Downtown Precise Plan, or other plans associated with development or conservation.

XII. MINERAL RESOURCES

XII. MINERAL RESOURCES— Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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?			X	
b) Result in the loss of availability of a locally-important mineral resource recovery Project Site delineated on a local general plan, specific plan or other land use plan?			X	

DISCUSSION: MINERAL RESOURCES

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?

Less Than Significant Impact. San Mateo County classifies Significant Mineral Resources as MRZ-2 (Mineral Resource Zone 2). The general plan designation for the Project Site is Schools which is not preserved for mineral use. This is also consistent with the Redwood City General Plan, Natural Resources Section that describes water resources, energy conservation, natural habitat, and urban forests as the main resources. There are no known mineral resources on the existing campus.

b) Result in the loss of availability of a locally-important mineral resource recovery Project Site delineated on a local general plan, specific plan or other land use plan?

Less Than Significant Impact. The Project will not result in the loss of availability of locally-important mineral resources.

XIII. NOISE

XIII. NOISE— Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		X		
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			X	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		X		
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X

DISCUSSION: NOISE

Environmental Setting:
The Redwood City General Plan defines noise as any "unwanted sound" and measures noise levels in units of decibels (dBA); which is a logarithmic unit of measurement indicating the relative amplitude of a sound. According to Noise Ordinance No. 2013, §1, 4-2-90, noise levels generated by construction activities, including demolition, alteration, repair or remodeling of or to existing structures and construction of new structures on property within the City, at more than 110 dB measured at any point within a residential district of the City are considered unlawful. It is also unlawful for any person to engage in construction activities in a residential district between the hours of eight o'clock (8:00) p.m. and seven o'clock (7:00) a.m. the following day, Monday through Friday of any week or at any time on Saturdays, Sundays or holidays if the noise level generated by any such activity exceeds the local ambient measured at any point within the residential district and outside of the plane of said property.

Construction of the new two-story building and new parking area may result in a temporary increase of noise levels within the project vicinity, but construction would be limited to the hours of 7:00 a.m. and 5:00 p.m. during the week. It is estimated that construction of the project will occur over approximately 18 months during the school year starting Fall of 2019. Project activities are not expected to operate at more than 110 dB. For a more detailed list of anticipated demolition and construction equipment to be used during Project activities, see page 17 of this report, section *III. Air Quality*. Using information provided by the U.S. Department of Transportation Federal Highway Administration, noise levels associated with Project demolition and construction equipment are estimated to range between 70 – 90 dBA; see Table 4 below.

Table 4: Anticipated Demolition and Construction Noise levels

Equipment Type	**L_{max} @ 50 feet (dBA)**		**Equipment Type**	**L_{max} @ 50 feet (dBA)**
Concrete/Industrial Saw	90		Fork lift	80-85
Dozer	82		Generator Sets	70-82
Tractors	84		Welders	74
Loaders	79		Cement and Mortar Mixers	79
Backhoes	78		Pavers	77
Graders	85		Rollers	80
Cranes	81		Air Compressor	78
where **L_{max} is the maximum noise level*				

Daily operational activities associated with continued use of the school will not result in significant noise impacts. Additionally, the District adopted Resolution No. 13 pertaining to California Government Code Section 53094 which authorized the District to become exempt from non-applicable city or county zoning ordinances; see **Appendix E**. This allows for exemption from city and county noise ordinances during demolition, construction, and any other associated Project activities.

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant with Mitigation Incorporated. Construction of the new facilities at the existing school may result in a temporary increase of noise levels within the project vicinity. Therefore, to reduce impacts of construction on neighboring communities, the following mitigation measure shall be implemented:

MM 20) *Noise Suppression Attachments and Minimal Idling*
The contractor shall employ appropriate noise suppression attachments (e.g., mufflers, etc.) on all equipment. Equipment idling shall be kept to a minimum and equipment turned off when not in use. Project activities shall not operate at more than 110 dB and are limited to the hours of 7:00 a.m. to 5:00 p.m. Monday through Friday of any week.

Additionally, the District adopted Resolution No. 13 pertaining to California Government Code Section 53094 which authorized the District to become exempt from non-applicable city or county zoning ordinances; see **Appendix E**.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact. Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Several different methods are used to quantify vibration. Typically, groundborne vibration generated by man-made activities attenuates rapidly with distance from the source of the vibration. Sensitive receptors to vibration include structures (especially older masonry structures), people (especially residents, the elderly, and sick), and vibration-sensitive equipment. Vibration amplitudes are usually expressed as either peak particle velocity (PPV) or the root mean square (RMS) velocity. The PPV is defined as the maximum instantaneous peak of the vibration signal. PPV is appropriate for evaluating potential damage to buildings, but it is not suitable for evaluating human response to vibration because it takes the human body time to respond to vibration signals. The response of the human body to vibration is dependent on the average amplitude of a vibration. The RMS of a signal is the average of the squared amplitude of the signal and is more appropriate for evaluating human response to vibration. PPV and RMS are normally described in units of inches per second (in/sec), and RMS is also often described in vibration decibels (VdB). During the construction of the new facility and parking area, the Site and immediate vicinity could be subject to ground borne vibration (e.g., from the movement of large pieces of equipment and loaded trucks); however, these impacts would be temporary and therefore less than significant. Additionally, the District adopted Resolution No. 13 pertaining to

California Government Code Section 53094 which authorized the District to become exempt from non-applicable city or county zoning ordinances; see **Appendix E**.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Less Than Significant Impact. Average ambient noise levels associated with the existing school are not expected to increase significantly as a result of the Project. Enrollment is not expected to increase, and noise levels associated with daily operational activities would not create any more noise than currently produced.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Less Than Significant with Mitigation Incorporated. As discussed in section a), the construction phase of the project would result in temporary increases in ambient noise levels. However, the implementation of **MM 20)** *Noise Suppression attachments and Minimal Idling* would ensure that construction-related noise impacts remain less than significant.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. Results from the Geologic and Safety Hazards Evaluation show the nearest airport runway is over two nautical miles to the east of the Project Sites. This is consistent with the *California Code of Regulations, Title 21*, Division 25, Chapter 2.1; *Education Code* Section 17215 and School Facilities Planning Division (SFPD) 4.01. The closest airport is San Carlos Airport approximately 4.4 miles northwest of the Site.

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. No private airstrips were identified in the Site vicinity; therefore, there would be no significant or adverse impact. The closest airport is San Carlos Airport approximately 4.4 miles northwest of the Site.

XIV. POPULATION AND HOUSING

XIV. POPULATION AND HOUSING— Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Induce substantial 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)?			X	
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X

DISCUSSION: POPULATION AND HOUSING

Environmental Setting:
The proposed Project is in response to growth within the District and planned development within the community. Modernization activities are required to keep the school current.

a) Induce substantial 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)?

Less Than Significant Impact. The project is in response to growth within the District and is not growth-inducing. The Project would not have a significant or adverse impact on population growth.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

No Impact. The Project is located on an existing operational school site and will not displace any housing.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No Impact. The Project will not displace any people. The Project is located on an existing operation school site.

XV. PUBLIC SERVICES

XV. PUBLIC SERVICES— Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Would the project 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 other performance objectives for any of the public services:				
Fire protection?			X	
Police protection?			X	
Schools?			X	
Parks?			X	
Other public facilities?			X	

DISCUSSION: PUBLIC SERVICES

Environmental Setting:
The Project would be served by the Redwood City Fire Department, Station #12 (3700 Jefferson Avenue) approximately 1.4 miles away. The Project would also be served by the Redwood City Police Department (1301 Maple Street) approximately 2.2 miles northeast of the Site. Several parks are in the vicinity of the Project Site, including Red Morton Community Park (0.3 miles southeast), Hawes Park (0.9 miles east), and Stafford Park (0.9 miles northwest).

a) Would the project 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 other performance objectives for any of the public services:

Fire protection?
Less Than Significant Impact. The Redwood City Fire Department includes seven fire stations with over 90 staff members. The call volume for the school will not necessitate a new fire facility. The project would also be required to comply with standard fire life safety and access requirements of DSA. The Redwood City Fire Department and the State of California Fire Marshall's Office

have the authority to review and approve the project site plans for emergency vehicle access and location and number of fire hydrants.

Police protection?
Less Than Significant Impact. The John Gill School is an existing school that would continue to be used for educational purposes. The proposed Project would not cause an increase to population and does not include the development of new housing. Therefore, the proposed Project would not require addition police department staffing to maintain its officer-to-population service ratio.

Schools?
Less Than Significant Impact. Modernization and additions to the existing school could have adverse environmental impacts; however, mitigations included in this document shall ensure less than significant impact is achieved. The Project is not creating a need for new schools since the project itself is intended to replace outdated school facilities on existing public school land.

Parks?
Less Than Significant Impact. The Project itself will not create additional demand for parks. The potential use of the school play areas may provide additional recreational facilities for residents.

Other public facilities?
Less Than Significant Impact. The Project is not expected to increase demand for other public facilities.

XVI. RECREATION

XVI. RECREATION—	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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?			X	
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?			X	

DISCUSSION: RECREATION

Environmental Setting:
The Project would continue to provide existing recreational facilities on site. Any impacts to nearby parks and recreational facilities as a result of student use is considered less than significant. Several parks are in the vicinity of the Project Site, including Red Morton Community Park (0.3 miles southeast), Hawes Park (0.9 miles east), and Stafford Park (0.9 miles northwest).

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?

Less Than Significant Impact. The Project Site has an existing play area and asphalt-paved play area for students and the community. The Project will not substantially increase the use of neighborhood parks; the school will have recreational areas on site.

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?

Less Than Significant Impact. The Project does not include changes to recreational facilities. The school provides a playfield, basketball courts, and asphalt-paved play areas; no changes will be made to these facilities.

XVII. TRANSPORTATION

XVII. TRANSPORTATION— Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?			X	
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?			X	
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
e) Result in inadequate emergency access?			X	
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?			X	
g) Be located within 500 feet of the edge of the closest traffic lane of a freeway or other busy traffic corridor (as defined in Senate Bill 352, Chapter 668, Statutes of 2003)?				X
h) Be located within 1,500 feet of a railroad easement?			X	

DISCUSSION: TRANSPORTATION

Environmental Setting:
Due to the addition of classrooms, the reconfiguration of parking spaces, and the reconfiguration of pick-up and drop-off zones, a Transportation Impact Study (TIS) was performed by TJKM in January of 2018 to further assess the potential impacts of the Project; see **Appendix L**. The study examined regional roadway facilities providing access to the John Gill School including State Route 82 (SR 82/El Camino Real) and State Route 84 (SR 84/Woodside Road); local roadways providing access including Jefferson Avenue, Avenue Del Ora, Myrtle Street, South Place and St. Francis Street. Results from the study determined that regional and local intersections would operate within the applicable jurisdiction standards of Redwood City during a.m. and p.m. peak hours. Project driveways were found to operate at acceptable LOS and on-site vehicle circulation was found to be adequate. Intersections Avenue Del Ora/Jefferson Avenue and Myrtle Street/Jefferson Avenue were found to operates at existing conditions of LOS F during the a.m. and p.m. peak hours. During the midday peak hour, all intersections operate within City of Redwood City standards Level of Service (LOS) D or better. Therefore, traffic operation issues are predicted to be less than significant.

a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, considering all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Less Than Significant Impact. Results from the traffic study found that circulation is not expected to create a significant impact. Major intersections were found to operate within the acceptable LOS range for Redwood City. Impacts to pedestrian, bicycle, and transit facilities were also expected to be less than significant. The local transit service operates well below capacity, and any additional trips generated by the project could be accommodated by existing bus services; see TSI at **Appendix L**.

b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Less Than Significant Impact. Results from the traffic study found that circulation is not expected to create a significant impact. Major intersections were found to operate within the acceptable LOS range for Redwood City. Intersections Avenue Del Ora/Jefferson Avenue and Myrtle Street/Jefferson Avenue operate at LOS F during the a.m., and p.m. peak hours. During the midday peak hour, all intersections operate within City of Redwood City standards Level of Service (LOS) D or better. Based on the City of Redwood City impact criteria the project was determined to have a less-than-significant impact at all the study intersections; see TSI at **Appendix L**.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

No Impact. No airport runways were identified within 2.0 nautical miles of the Site as identified in the Geologic and Safety Hazards Evaluation. This is consistent with the *California Code of Regulations, Title 21*, Division 25, Chapter 2.1; *Education Code* Section 17215 and School Facilities Planning Division (SFPD) 4.01. The closest airport is San Carlos Airport approximately 4.4 miles northwest of the Site.

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less Than Significant Impact. Site plans are being developed by qualified architects with the knowledge of standards and requirements set forth by the Division of the State Architect. The design will not create an impact or incompatible use. TJKM examined the project site plan in order to evaluate the adequacy of on-site vehicle circulation including vans and emergency vehicles. Based on this evaluation, proposed on-site vehicle circulation was determined to by adequate and would not result in any significant traffic operations issues. On-site queueing is expected to be minimal. Additionally, sight distance was evaluated to determine if drivers would have adequate visibility to enter a roadway safely without resulting in a conflict with traffic already on the roadway. Sight distance requirements vary depending on the roadway speeds. The speed limit on Jefferson Avenue is 30 mph. According to the Highway Design Manual (HDM), Chapter 200, 2014, the required minimum stopping sight distance for design speed of 30 mph is 200 feet. The line of sight for vehicles exiting the driveways and vehicles travelling northbound and southbound on Jefferson Avenue are clear and visible. It was determined that the project does not substantially increase hazards due to any design features; see TSI at **Appendix L**.

e) Result in inadequate emergency access?

Less Than Significant Impact. Adequate emergency access will be included in the project design; see Site Plans at **Appendix A**. Additionally, results from the TIS determined that Project circulation and design would allow for adequate passage of emergency vehicles; see TSI at **Appendix L**.

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Less Than Significant Impact. The Project will not interfere with any adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. The traffic study showed the Project is consistent with Redwood City jurisdictional standards. Pedestrian access to the site is located at existing sidewalks on Jefferson Avenue, Avenue Del Ora, St. Francis Street, Myrtle Street, and Hawes Street along both sides within the project vicinity. The RCSD implements Safe Routes to School which is a program that aims to make commutes safer for students to get to school and encourages walking and biking where safety is not a barrier. The proposed project does not conflict with existing and planned pedestrian or bicycle facilities and would add very few trips to existing transit facilities; this can be accommodated by the existing transit capacity. Currently there is a Class III bicycle route provided on Jefferson Avenue and Myrtle Street along both sides of the roadway in the vicinity of the project site. The San Mateo County Comprehensive Bicycle and Pedestrian Plan proposes future designation of Jefferson Avenue has Class II facilities within the study area. There are adequate signage/markings for the bicyclists to maneuver without confusion. Therefore, there will be no degrading of pedestrian, bicycle, or

transit facilities related to the school operations as stated in the Traffic Study; see TSI at **Appendix L**.

g) Be located within 500 feet of the edge of the closest traffic lane of a freeway or other busy traffic corridor (as defined in Senate Bill 352, Chapter 668, Statutes of 2003)?

No Impact. No major roads are identified within 500 feet of the Site as identified in the Geologic and Safety Hazards Evaluation.

h) Be located within 1,500 feet of a railroad easement?

Less Than Significant Impact. Based on the Geologic and Safety Hazards Evaluation, the Site is not located within 1,500 feet of a railroad easement.

XVIII. TRIBAL CULTURAL RESOURCES

XVIII. TRIBAL CULTURAL RESOURCES— Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Cause a substantial adverse change in the significance of a tribal cultural resources, defined in Public Resources Code section 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 that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or			X	
b) A resource 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 Section 5024.1.in applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1 the lead agency shall consider the significance of the resource to a California Native American tribe.			X	

DISCUSSION: TRIBAL CULTURAL RESOURCES

Environmental Setting:
Assembly Bill 52, which became effective on July 1, 2015, revised several portions of California's Public Resources Code to broaden the requirements for tribal consultation and to provide a more formal structure for California's tribes to provide meaningful input to protect their cultural heritage during the CEQA process. California Public Resources Code section 21084.2 now establishes that "[a] project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment." Lead agencies are required to avoid, when feasible, damaging effects to any tribal cultural resource. This requires lead agencies to begin consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of the proposed project, "[p]rior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for a project." Pub. Res. Code § 21080.1.1(b).

Consultation with Native American tribes is necessary, not only for the purpose of determining appropriate mitigation measures, but also to help the lead agency identify locations where the proposed project might impact culturally significant areas. Assembly Bill 52's requirement that lead agencies consult with tribes early in a project's development facilitates identification of

cultural resources known to tribes and provides a better opportunity to undertake appropriate mitigation measures, if needed.

The Redwood City School District sent a Consultation Request Form to the Native American Heritage Commission (NAHC) on July 17, 2017, requesting CEQA Tribal Consultation List (per AB 52) and a Sacred Lands File check. The NAHC responded with a consultation list of tribes within the boundaries of the Site. Five different tribes were listed in the consultation letter and the District mailed tribal notification letter to the corresponding tribes on October 25, 2017. The Districted did not receive any response. It is possible that an unknown Tribal Cultural Resource (TCR) could be found during ground disturbing activities. Compliance with existing federal, State, and local laws and regulations would protect unrecorded TCR's within the project site through excavation or preservation activities, thereby preventing or minimizing the material impairment of archaeological deposits.

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resources, defined in Public Resources Code section 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 that is: Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k),

Less Than Significant Impact. A Sacred Lands File check was requested on July 17th, 2017, and results were negative for tribal resources. There are no known listed or eligible for listing resources on the Site.

b) Would the project cause a substantial adverse change in the significance of a tribal cultural resources, defined in Public Resources Code section 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 that is: A resource 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 Section 5024.1.in applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1 the lead agency shall consider the significance of the resource to a California Native American tribe.

Less Than Significant Impact. The District mailed five tribal notification letters to the corresponding tribes from the NAHC consultation list. No responses were obtained by the District. As a result, no known resources will be significantly or adversely impacted.

XIX. UTILITIES AND SERVICE SYSTEMS

XIX. UTILITIES AND SERVICE SYSTEMS— Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			X	
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?		X		
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			X	
e) Result in a determination by the wastewater 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?			X	
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?		X		
g) Comply with federal, state, and local statutes and regulations related to solid waste?		X		

DISCUSSION: UTILITIES AND SERVICE SYSTEMS

Environmental Setting:
Redwood City utilities are provided by Pacific Gas & Electric for gas and electric and Redwood City Public Works Department for water supply, San Mateo County for wastewater services, and Recology for garbage services. Two new High Low drinking fountains will be installed at the Project Site per ADA requirements. The high is at 43" and the low (Americans With Disabilities, ADA) is at 36". New Restrooms will be constructed at various locations; two restrooms in building A, three restrooms will be located on the first floor of the new Administrative wing, and ten restrooms will be located in various classroom wings. A total of six restrooms will serve as replacement restrooms, the remaining nine restrooms are considered new restrooms.

The Project would meet the requirements of Title 24 including Part 11 of the California Green Building Standards Code (CALGreen). CALGreen was developed to (1) reduce GHG from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the environmental directives of the administration. The establishment of the CALGreen Code has been an important step toward more efficient and responsible building design. The California Air Resources Board estimates that the mandatory provisions in CALGreen will reduce GHG by three million metric tons by the year 2020, and this number should increase due to the continued efforts to minimize the impact buildings have on the environment.

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Less Than Significant Impact. The Site is currently supported by the Public Works Department. Additions to the school site are considered minor and meet the qualifications of a Class 14 Categorical Exemption under the California Environmental Quality Act. It is not likely that the project would exceed wastewater treatment requirements of the Redwood City Public Works Department. The Project Site is with the Boundaries of the Regional Board 2 for the San Francisco Bay area and does not involve or require any water or wastewater treatment facilities that would exceed any requirements of the Regional Water Quality Control Board.

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Less Than Significant Impact. The project will not require or result in the construction of new water or wastewater treatment facilities or the expansion of existing facilities. All accompaniments to the existing school site are considered minor additions. The Project Site is with the Boundaries of the Regional Board 2 for the San Francisco Bay area and does not involve or require any water or wastewater treatment facilities that would exceed any requirements of the Regional Water Quality Control Board.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Less Than Significant with Mitigation Incorporated. Storm water management will be directed to existing City infrastructure. Implementation of mitigation measure **MM 19)** *Stormwater Pollution Prevention Plan* would ensure water quality standards and waste discharge requirements are met.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Less Than Significant Impact. The Project would continue to be served by water conveyed from Redwood City and is not expected to significantly impact to the water supply any more than it currently does. Project estimated water usage is approximately 15,072 gallons per day (Gal/day) for the new administration/classroom Building and existing Buildings A, D, and E. Information provided by CAW architects determined the new administration/classroom Building would utilize 7,692 Gal/day, Building A would utilized 4,068 Gal/day, Building D would utilize 1,656 Gal/day, and Building E would utilize 1,656 Gal/day. Sufficient water supply would be accommodated by project design and will be approved by the Redwood City Fire Department.

e) Result in a determination by the wastewater 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?

Less Than Significant Impact. The project is not expected to increase the need of the wastewater treatment capacity for Redwood City. During circulation of this CEQA document, Redwood City will be able to review and comment on the Project. The expected amount of wastewater from the site is an amount the existing infrastructure already accommodates, and significant impact is not expected.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Less Than Significant with Mitigation Incorporated. Nonhazardous solid waste disposal at the Site would be limited to some construction debris and typical school-related materials (e.g., papers, school supplies, and food waste), which are not expected to have a significant impact on local landfills. Solid waste disposal will occur at permitted landfills in accordance with federal, state, and local regulations. The closest local landfill facility is the Corinda Los Trancos (Ox Mountain) Sanitary Landfill, located at 12310 San Mateo Road, approximately 14 miles west of the Project Site. This landfill facility has permitted capacity/service life until 2034.

Soil Mitigation Plans (SMP) at the Site could impact certain landfills for potentially hazardous soil waste. However, implementation of mitigation measures **MM 9)** *SMP: Remediation and Site Management*, **MM 10)** *SMP: Site-Specific Health and Safety Worker Requirements*, **MM 11)** *SMP: Pre-Field Activities*, **MM 12)** *SMP: Site Control*, **MM 13)** *SMP: Excavation of impacted soil, Site Grading, and Capping System*, **MM 14)** *SMP: Dust and Erosion Control*, **MM 15)** *SMP: Air Monitoring;* **MM 16)** *Decontamination*, **MM 17)** *SMP: Field Documentation*, and

MM 18) *SMP: Confirmation Soil Sampling* will ensure appropriate landfill services are utilized at the time of off haul; see SMP at **Appendix J**.

g) Comply with federal, state, and local statutes and regulations related to solid waste?

Less Than Significant with Mitigation Incorporated. The Ox Mountains Sanitary landfill would be utilized for nonhazardous solid waste related to construction activities. The Ox Mountain Sanitary landfill is licensed and operates pursuant to all federal, state and local statutes and regulations as overseen by the San Mateo County Health System's Environmental Health Division.

Solid waste with potential for hazardous content would be disposed of in accordance with procedures outlined in the SMP. Implementation of mitigation measures **MM 9)** *SMP: Remediation and Site Management*, **MM 10)** *SMP: Site-Specific Health and Safety Worker Requirements*, **MM 11)** *SMP: Pre-Field Activities*, **MM 12)** *SMP: Site Control*, **MM 13)** *SMP: Excavation of impacted soil, Site Grading, and Capping System*, **MM 14)** *SMP: Dust and Erosion Control*, **MM 15)** *SMP: Air Monitoring;* **MM 16)** *Decontamination*, **MM 17)** *SMP: Field Documentation*, and **MM 18)** *SMP: Confirmation Soil Sampling* will ensure compliance with federal, state, and local statutes and regulations related to solid waste; see SMP at **Appendix J**.

XX. WILDFIRE

XX. WILDFIRE— Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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?				X
b) Due to the slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				X
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?				X
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?				X

DISCUSSION: WILDFIRE

Environmental Setting:
According to the Cal Fire, Fire and Resource Assessment Program (FRAP), the Project Site is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones. The Fire Hazard Severity Zone Viewer (FHSZ) indicates that John Gill School is within a local responsibility area and is neither very high, high, or moderate for fire hazard severity. This was confirmed on January 16, 2019 via phone call to the Cal Fire Northern Region Operations. Therefore, the project will have no impact to wildfires.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

XXI. MANDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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, 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?		X		
b) Does the project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?		X		
c) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?		X		
d) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		X		

DISCUSSION: MANDATORY FINDINGS OF SIGNIFICANCE

Environmental Setting:
The Project would result in potentially significant impacts to the following areas if unmitigated: Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, and Noise. The recommended mitigation measures would reduce these potentially significant impacts to a less than significant level.

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, 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?

Less Than Significant with Mitigation Incorporated. The project is not expected to degrade the quality of the environment, substantially reduce or threaten natural habitats or eliminate important examples of the major periods of California history or prehistory. Mitigation measures **MM 1)** through **MM 20)** would ensure that the project would not result in any significant or adverse impacts.

b) Does the project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?

Less Than Significant with Mitigation Incorporated. The proposed Project has no potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals. The Project will enhance and contribute to long-term environmental goals with some short-term environmental impacts which, with the mitigation measures proposed in this document, will be reduced to a less than significant level.

c) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less Than Significant with Mitigation Incorporated. All potential impacts described in previous sections are considered less than significant or would be mitigated to a level that is less than significant. Implementation of **MM 1)** through **MM 20)** would ensure that the project would not result in any significant impacts. The project could be characterized as having some cumulative impacts; however, the mitigation measures for this project reduce the project impact to a level that is less than significant.

d) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant with Mitigation Incorporated. The project, with mitigation measures **MM 1)** through **MM 20)**, will not cause substantial or adverse effects on human beings.

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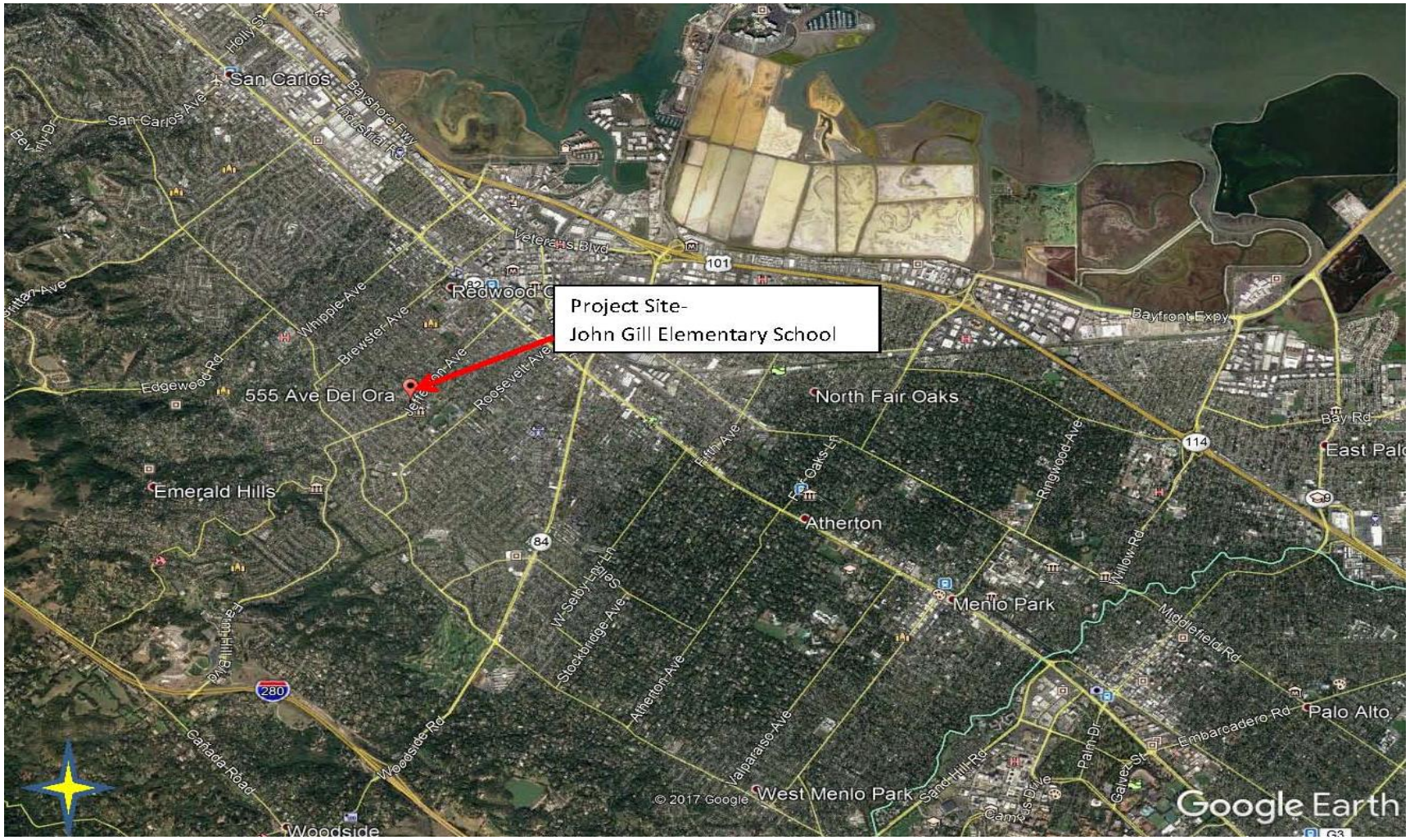
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Figure 1
Project Site Location Map – Vicinity



Source:
Google Earth
Not to scale.

Site Location Map – Vicinity
Redwood City School District
John Gill School

Figure
1

N

Figure 2
Project Site Location Map – Geographical

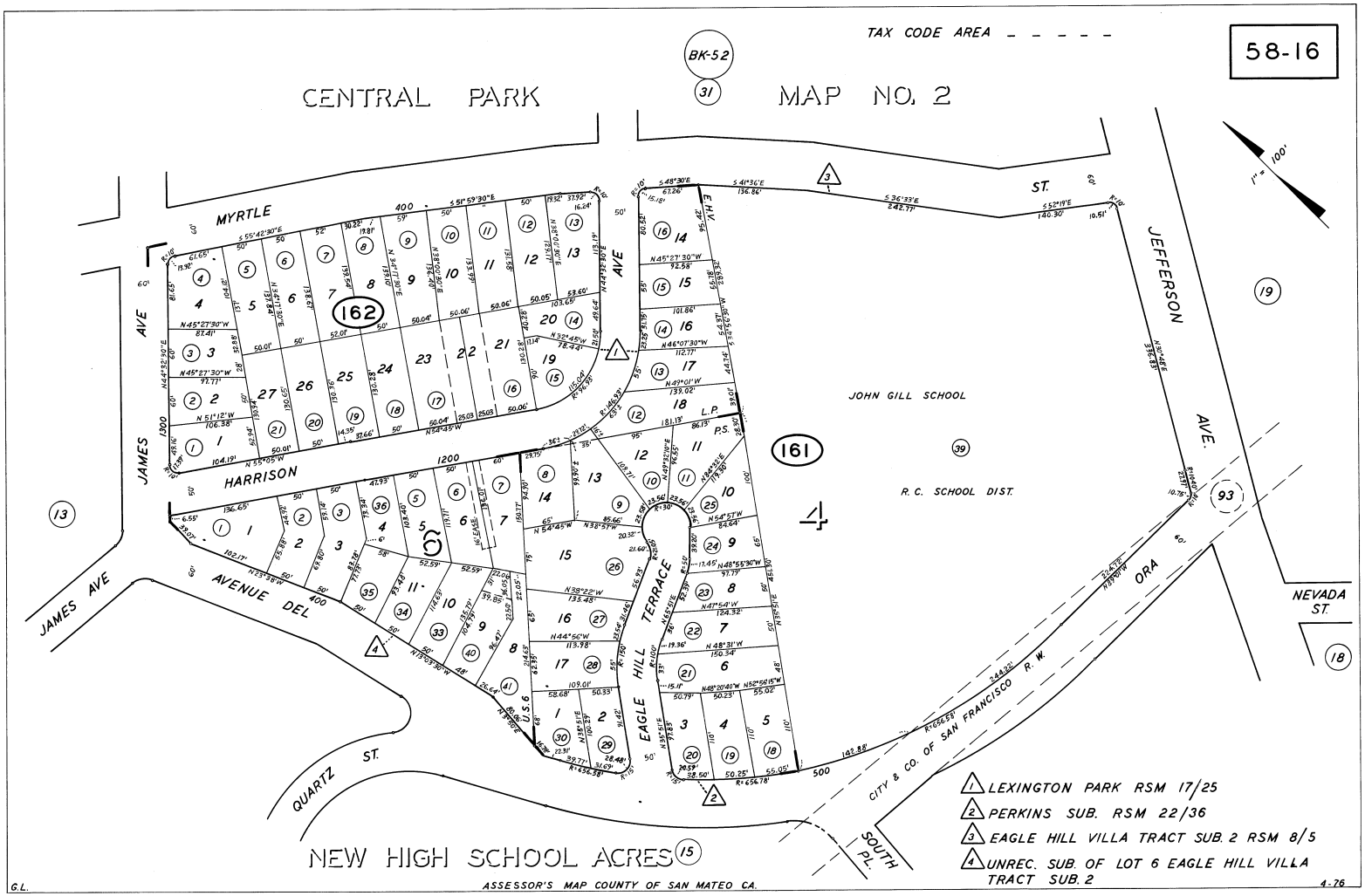


Source:
Google Earth Pro

Site Location Map – Geographical
Redwood City School District
John Gill School

Figure
2

Figure 3
Project Site Location Map – Parcel



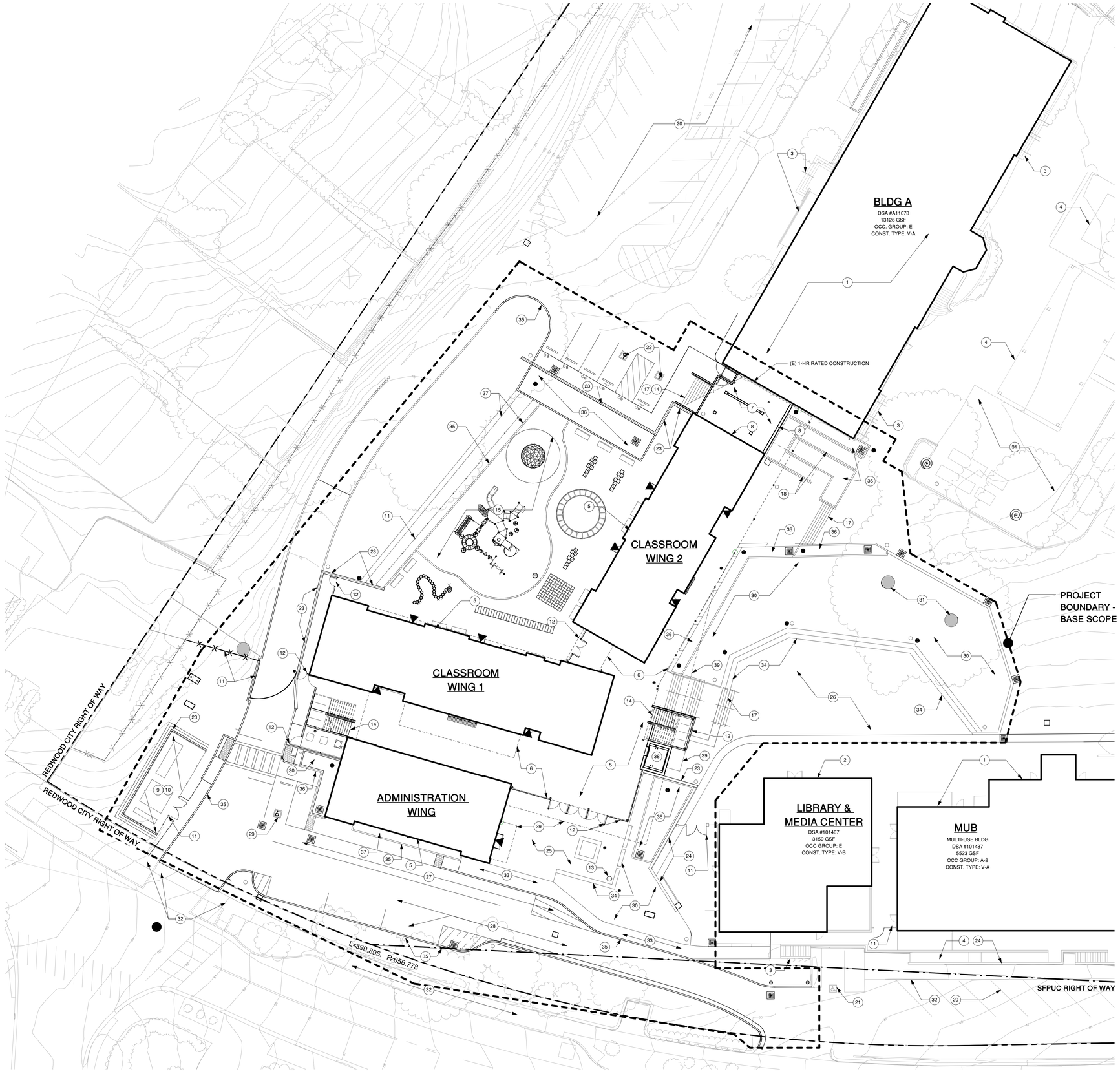
Source:
County of San Mateo
Not to scale.

Site Location Map – Parcel

Redwood City School District
John Gill School

Figure
3

Appendix A
Proposed Site Plan



1 SITE PLAN
1/16" = 1'-0"

GENERAL NOTES

1. REFER TO A0.21 FOR SITE AND BUILDING DEMOLITION SCOPE. REFER TO CIVIL, ELECTRICAL AND PLUMBING DRAWINGS FOR SITE DEMOLITION SCOPE.
2. REFER TO A0.01 FOR BUILDING CODE ANALYSIS.
3. REFER TO A0.02 FOR FIRE LIFE SAFETY AND EGRESS PLAN.
4. REFER TO A0.02 FOR ACCESSIBILITY SITE PLAN.
5. REFER TO CIVIL DRAWINGS FOR EMERGENCY ACCESS, FIRE HYDRANT AND FDC LOCATIONS.
6. REFER TO CIVIL DRAWINGS FOR CUT AND FILL DIAGRAMS. REFER TO CIVIL AND LANDSCAPE FOR GRADING AND SPOT ELEVATIONS.
7. REFER TO CIVIL, PLUMBING AND ELECTRICAL DRAWINGS FOR UTILITY CONNECTIONS.
8. REFER TO CIVIL DRAWINGS FOR SITE DRAINAGE AND STORM WATER TREATMENT PLAN.
9. REFER TO LANDSCAPE DRAWINGS FOR SITE FENCE AND GATE TYPES. REFER TO ARCHITECTURAL PLANS FOR BUILDING FENCE AND GATE TYPES.
10. REFER TO LANDSCAPE DRAWINGS FOR HARDSCAPE, PAVING, GROUND COVER, AND PLANTING PLANS.
11. REFER TO LANDSAPE AND CIVIL DRAWINGS FOR TREE PROTECTION ZONES AND REQUIREMENTS.
12. REFER TO ARCHITECTURAL FLOOR PLANS FOR SCOPE WITHIN BUILDINGS.

KEYNOTES

1. EXISTING BUILDING TO REMAIN. REFER TO ARCHITECTURAL FLOOR PLANS FOR MODERNIZATION SCOPE; A-A1.01 - A-A3.02, & M-A1.01 - M-A2.0
2. EXISTING BUILDING TO REMAIN. REFER TO ARCHITECTUREAL FLOOR PLANS. SCOPE LIMITED TO HARDWARE REPLACEMENT, SURVEILLANCE CAMERAS AND EXTERIOR PAINT. SCOPE TO BE CARRIED AS AN ADD ALT
3. EXISTING STAIRS AND RAMPS TO REMAIN
4. EXISTING SITE STRUCTURES TO REMAIN
5. NEW BUILDING. REFER TO ARCHITECTURAL FLOOR PLANS: A2.01& A2.02
6. SECOND FLOOR COVERED WALKWAY ABOVE. REFER TO ARCHITECTURAL FLOOR PLANS: A2.01 & A2.02
7. NEW EARTH FILL UNDER SECOND FLOOR DECK ABOVE. REFER TO ARCHITECTURAL FLOOR PLANS A2.01 & A2.02
8. NEW CONCRETE RETAINING WALL. REFER TO ARCHITECTURAL FLOOR PLAN A2.01. REFER TO LANDSCAPE, CIVIL, AND STRUCTURAL DRAWINGS FOR ADDITIONAL SITE RETAINING WALL INFORMATION
9. NEW SERVICE YARD ENCLOSURE. CONCRETE RETAINING WALL ALONG NW SIDE WITH 8'-0" TALL FENCE AND GATES. REFER TO LANDSCAPE DRAWINGS FOR HEIGHT AND MATERIAL. REFER TO STRUCTURAL DRAWINGS FOR FOOTING AND REINFORCING. REFER TO CIVIL DRAWINGS FOR SURROUNDING GRADES
10. NEW UTILITY CONNECTIONS WITHIN NEW SERVICE YARD ENCLOSURE. REFER TO CIVIL, ELECTRICAL AND PLUMBING DRAWINGS FOR LAYOUT OF EQUIPMENT
11. SITE FENCES AND GATES. REFER TO LANDSCAPE DRAWINGS
12. BUILDING GATES & ENCLOSURES. REFER TO ARCHITECTURAL PLANS
13. RE-INSTALL EXISTING FLAGPOLE WITH NEW FOUNDATION. REFER TO LANDSCAPE FOR LOCATION
14. BUILDING EGRESS STAIR, SEE ARCH PLANS
15. ADD ALTERNATE: KINDER PLAY STRUCTURE AND PLAY SURFACE. REFER TO LANDSCAPE DRAWINGS
16. NEW SLOPED WALKWAY. REFER TO LANDSCAPE AND CIVIL DRAWINGS
17. NEW CONCRETE STAIRS. REFER TO LANDSCAPE AND CIVIL DRAWINGS
18. NEW CONCRETE RAMP (ON GRADE). REFER TO LANDSCAPE AND ARCHITECTURAL DRAWINGS
19. NEW STAIRS (ON GRADE). REFER TO LANDSCAPE AND ARCHITECTURAL DRAWINGS
20. EXISTING PARKING LOT AND STALLS TO REMAIN
21. EXISTING VAN ACCESSIBLE PARKING STALL TO REMAIN
22. NEW STANDARD AND VAN ACCESSIBLE PARKING STALL STRIPING WITH 5' WIDE ACCESS PATH
23. NEW RETAINING WALL. REFER TO LANDSCAPE DRAWINGS FOR HEIGHT AND MATERIAL. REFER TO STRUCTURAL DRAWINGS FOR FOOTING AND REINFORCING. REFER TO CIVIL DRAWINGS FOR SURROUNDING GRADES
24. EXISTING RETAINING WALL TO REMAIN
25. NEW ENTRANCE PLAZA. REFER TO LANDSCAPE DRAWINGS
26. NEW LUNCH QUAD. REFER TO LANDSCAPE DRAWINGS
27. NEW DROP-OFF LANE WITH ACCESSIBLE DROP-OFF ZONE. REFER TO LANDSCAPE AND CIVIL DRAWINGS
28. NEW EXTENDED DRIVEWAY AND PARALLEL PARKING STALLS. REFER TO LANDSCAPE AND CIVIL DRAWINGS
29. NEW VAN ACCESSIBLE PARKING STALL: SEE CIVIL AND LANDSCAPE DRAWINGS
30. NEW TREES AND PLANTING AREA. REFER TO LANDSCAPE DRAWINGS
31. EXISTING PLANTING AREA TO REMAIN. PROTECT EXISTING TREES PER TREE PROTECTION REQUIREMENTS
32. EXISTING CONCRETE SIDEWALK AND DRIVEWAY CURB-CUTS TO REMAIN
33. NEW CONCRETE SIDEWALK. REFER TO LANDSCAPE AND CIVIL DRAWINGS
34. CONCRETE SEAT WALL, REFER TO LANDSCAPE DRAWINGS
35. CONCRETE CURB, SEE CIVIL DRAWINGS
36. CAST IN PLACE CONCRETE STORM WATER FITRATION BASIN & PLANTING AREA, S.L.D., S.C.D.
37. PLANTING BED, REFER TO LANDSCAPE DRAWINGS
38. EXTERIOR ACCESSIBLE ELEVATOR W/ STOPS TO FIRST FLOOR, SECOND FLOOR, AND LOWER LUNCH QUAD LEVEL
39. ROOF CANOPY ABOVE

SITE PLAN LEGEND

- (N) FENCE AND GATE
- (E) FENCE AND GATE
- PROPERTY LINE (REDWOOD CITY RIGHT OF WAY)
- SFPUC RIGHT OF WAY
- PROJECT BOUNDARY (BASE SCOPE)
- EXISTING TREE, SEE LANDSCAPE DRAWINGS
- EXTERIOR POLE MOUNTED LIGHT, S.E.D., S.L.D.
- DOWNSPOUT (DS)
- STEEL & CONCRETE BOLLARD (B)

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STAMP

CONSULTANTS

MILESTONE	DATE
100% SCHEMATIC DESIGN	12/18/2017
100% DESIGN DEVELOPMENT	06/01/2018
50% CONSTRUCTION DOCS	10/19/2018
95% CONSTRUCTION DOCS	12/14/2018

PROJECT NAME
REDWOOD CITY SCHOOL DISTRICT
JOHN GILL
ELEMENTARY SCHOOL
555 AVENUE DEL ORA
REDWOOD CITY, CA, 94062

SHEET TITLE
SITE PLAN

APPROVAL STAMP
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
APPL.
ACS ____ FLS ____ SSS ____
DATE ____

PROJECT NO. 16019
DRAWN BY S. LEE / R. MARLIN
CHECKED BY K. ABIKO

SHEET
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12/14/18 11:08:28 AM

Appendix B
Site Photos

Redwood City School District
Site Photos – John Gill School Modernization Project



Facing south of the eastern Site boundary, parallel to Jefferson Ave.



On Campus, facing northwest, parallel to Ave Del Ora



Center of campus facing northeast towards Myrtle Street



Facing north, towards the school office



Near center of campus, facing westward toward Eagle Hill Terrace



Facing eastward along campus boundary, parallel with Myrtle Street

Source: School Site Solutions, Inc.	**Site Photos** Redwood City School District John Gill School Modernization Project	SSS

Appendix C
CalEEMod Analysis

John Gill School Modernization Project

Bay Area AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	49.40	1000sqft	1.13	49,400.00	0
Unenclosed Parking Structure	45.00	Space	0.41	18,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Parking will be reconfigured, with the same 45 spots as originated

Construction Phase - Construction will take place for approximately 18 months

Off-road Equipment -

Demolition -

Mobile Commute Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	250.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	250.00
tblArchitecturalCoating	EF_Parking	150.00	0.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	250.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	250.00
tblAreaCoating	Area_EF_Parking	150	0
tblConstructionPhase	NumDays	200.00	360.00
tblConstructionPhase	PhaseEndDate	4/13/2020	11/23/2020
tblProjectCharacteristics	OperationalYear	2018	2021

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.1812	1.3892	1.0970	2.0500e-003	0.0438	0.0737	0.1174	0.0147	0.0706	0.0853	0.0000	175.5915	175.5915	0.0304	0.0000	176.3526
2020	0.8316	1.9374	1.7167	3.2700e-003	0.0351	0.0969	0.1320	9.5300e-003	0.0935	0.1031	0.0000	276.5967	276.5967	0.0437	0.0000	277.6891
Maximum	**0.8316**	**1.9374**	**1.7167**	**3.2700e-003**	**0.0438**	**0.0969**	**0.1320**	**0.0147**	**0.0935**	**0.1031**	**0.0000**	**276.5967**	**276.5967**	**0.0437**	**0.0000**	**277.6891**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.1812	1.3892	1.0970	2.0500e-003	0.0438	0.0737	0.1174	0.0147	0.0706	0.0853	0.0000	175.5914	175.5914	0.0304	0.0000	176.3524
2020	0.8316	1.9374	1.7167	3.2700e-003	0.0351	0.0969	0.1320	9.5300e-003	0.0935	0.1031	0.0000	276.5965	276.5965	0.0437	0.0000	277.6889
Maximum	**0.8316**	**1.9374**	**1.7167**	**3.2700e-003**	**0.0438**	**0.0969**	**0.1320**	**0.0147**	**0.0935**	**0.1031**	**0.0000**	**276.5965**	**276.5965**	**0.0437**	**0.0000**	**277.6889**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	6-3-2019	9-2-2019	0.7080	0.7080
2	9-3-2019	12-2-2019	0.6461	0.6461
3	12-3-2019	3-2-2020	0.6114	0.6114
4	3-3-2020	6-2-2020	1.2297	1.2297
5	6-3-2020	9-2-2020	0.6003	0.6003
6	9-3-2020	9-30-2020	0.1827	0.1827
		Highest	1.2297	1.2297

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2199	1.0000e-005	8.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6900e-003	1.6900e-003	0.0000	0.0000	1.8000e-003
Energy	4.4100e-003	0.0401	0.0337	2.4000e-004		3.0500e-003	3.0500e-003		3.0500e-003	3.0500e-003	0.0000	122.6449	122.6449	4.4100e-003	1.5400e-003	123.2137
Mobile	0.1431	0.6854	1.5872	5.3400e-003	0.4468	4.9900e-003	0.4518	0.1199	4.6700e-003	0.1246	0.0000	489.5198	489.5198	0.0188	0.0000	489.9909
Waste						0.0000	0.0000		0.0000	0.0000	13.0361	0.0000	13.0361	0.7704	0.0000	32.2963
Water						0.0000	0.0000		0.0000	0.0000	0.4545	6.0053	6.4597	0.0470	1.1600e-003	7.9786
Total	**0.3675**	**0.7254**	**1.6218**	**5.5800e-003**	**0.4468**	**8.0400e-003**	**0.4549**	**0.1199**	**7.7200e-003**	**0.1277**	**13.4905**	**618.1717**	**631.6622**	**0.8406**	**2.7000e-003**	**653.4814**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2199	1.0000e-005	8.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6900e-003	1.6900e-003	0.0000	0.0000	1.8000e-003
Energy	4.4100e-003	0.0401	0.0337	2.4000e-004		3.0500e-003	3.0500e-003		3.0500e-003	3.0500e-003	0.0000	122.6449	122.6449	4.4100e-003	1.5400e-003	123.2137
Mobile	0.1431	0.6854	1.5872	5.3400e-003	0.4468	4.9900e-003	0.4518	0.1199	4.6700e-003	0.1246	0.0000	489.5198	489.5198	0.0188	0.0000	489.9909
Waste						0.0000	0.0000		0.0000	0.0000	13.0361	0.0000	13.0361	0.7704	0.0000	32.2963
Water						0.0000	0.0000		0.0000	0.0000	0.4545	6.0053	6.4597	0.0470	1.1600e-003	7.9786
Total	**0.3675**	**0.7254**	**1.6218**	**5.5800e-003**	**0.4468**	**8.0400e-003**	**0.4549**	**0.1199**	**7.7200e-003**	**0.1277**	**13.4905**	**618.1717**	**631.6622**	**0.8406**	**2.7000e-003**	**653.4814**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/3/2019	6/28/2019	5	20	
2	Site Preparation	Site Preparation	6/29/2019	7/2/2019	5	2	
3	Grading	Grading	7/3/2019	7/8/2019	5	4	
4	Building Construction	Building Construction	7/9/2019	11/23/2020	5	360	
5	Paving	Paving	4/14/2020	4/27/2020	5	10	
6	Architectural Coating	Architectural Coating	4/28/2020	5/11/2020	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0.41

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 74,100; Non-Residential Outdoor: 24,700; Striped Parking Area: 1,080 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	72.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	28.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.8200e-003	0.0000	7.8200e-003	1.1800e-003	0.0000	1.1800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0230	0.2268	0.1489	2.4000e-004		0.0129	0.0129		0.0120	0.0120	0.0000	21.4161	21.4161	5.4500e-003	0.0000	21.5524
Total	**0.0230**	**0.2268**	**0.1489**	**2.4000e-004**	**7.8200e-003**	**0.0129**	**0.0207**	**1.1800e-003**	**0.0120**	**0.0132**	**0.0000**	**21.4161**	**21.4161**	**5.4500e-003**	**0.0000**	**21.5524**

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.3000e-004	0.0113	2.2000e-003	3.0000e-005	6.1000e-004	4.0000e-005	6.5000e-004	1.7000e-004	4.0000e-005	2.1000e-004	0.0000	2.7883	2.7883	1.5000e-004	0.0000	2.7920
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.7000e-004	3.5000e-004	3.5600e-003	1.0000e-005	1.0300e-003	1.0000e-005	1.0300e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.9292	0.9292	2.0000e-005	0.0000	0.9298
Total	**8.0000e-004**	**0.0116**	**5.7600e-003**	**4.0000e-005**	**1.6400e-003**	**5.0000e-005**	**1.6800e-003**	**4.4000e-004**	**5.0000e-005**	**4.9000e-004**	**0.0000**	**3.7175**	**3.7175**	**1.7000e-004**	**0.0000**	**3.7218**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.8200e-003	0.0000	7.8200e-003	1.1800e-003	0.0000	1.1800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0230	0.2268	0.1489	2.4000e-004		0.0129	0.0129		0.0120	0.0120	0.0000	21.4161	21.4161	5.4500e-003	0.0000	21.5524
Total	**0.0230**	**0.2268**	**0.1489**	**2.4000e-004**	**7.8200e-003**	**0.0129**	**0.0207**	**1.1800e-003**	**0.0120**	**0.0132**	**0.0000**	**21.4161**	**21.4161**	**5.4500e-003**	**0.0000**	**21.5524**

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.3000e-004	0.0113	2.2000e-003	3.0000e-005	6.1000e-004	4.0000e-005	6.5000e-004	1.7000e-004	4.0000e-005	2.1000e-004	0.0000	2.7883	2.7883	1.5000e-004	0.0000	2.7920
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.7000e-004	3.5000e-004	3.5600e-003	1.0000e-005	1.0300e-003	1.0000e-005	1.0300e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.9292	0.9292	2.0000e-005	0.0000	0.9298
Total	**8.0000e-004**	**0.0116**	**5.7600e-003**	**4.0000e-005**	**1.6400e-003**	**5.0000e-005**	**1.6800e-003**	**4.4000e-004**	**5.0000e-005**	**4.9000e-004**	**0.0000**	**3.7175**	**3.7175**	**1.7000e-004**	**0.0000**	**3.7218**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.8000e-003	0.0000	5.8000e-003	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7100e-003	0.0195	7.8900e-003	2.0000e-005		8.8000e-004	8.8000e-004		8.1000e-004	8.1000e-004	0.0000	1.5467	1.5467	4.9000e-004	0.0000	1.5589
Total	**1.7100e-003**	**0.0195**	**7.8900e-003**	**2.0000e-005**	**5.8000e-003**	**8.8000e-004**	**6.6800e-003**	**2.9500e-003**	**8.1000e-004**	**3.7600e-003**	**0.0000**	**1.5467**	**1.5467**	**4.9000e-004**	**0.0000**	**1.5589**

3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.2000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0572	0.0572	0.0000	0.0000	0.0572
Total	**3.0000e-005**	**2.0000e-005**	**2.2000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0572**	**0.0572**	**0.0000**	**0.0000**	**0.0572**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.8000e-003	0.0000	5.8000e-003	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7100e-003	0.0195	7.8900e-003	2.0000e-005		8.8000e-004	8.8000e-004		8.1000e-004	8.1000e-004	0.0000	1.5467	1.5467	4.9000e-004	0.0000	1.5589
Total	**1.7100e-003**	**0.0195**	**7.8900e-003**	**2.0000e-005**	**5.8000e-003**	**8.8000e-004**	**6.6800e-003**	**2.9500e-003**	**8.1000e-004**	**3.7600e-003**	**0.0000**	**1.5467**	**1.5467**	**4.9000e-004**	**0.0000**	**1.5589**

3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.2000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0572	0.0572	0.0000	0.0000	0.0572
Total	**3.0000e-005**	**2.0000e-005**	**2.2000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0572**	**0.0572**	**0.0000**	**0.0000**	**0.0572**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.8300e-003	0.0000	9.8300e-003	5.0500e-003	0.0000	5.0500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8400e-003	0.0321	0.0132	3.0000e-005		1.4700e-003	1.4700e-003		1.3600e-003	1.3600e-003	0.0000	2.5336	2.5336	8.0000e-004	0.0000	2.5536
Total	**2.8400e-003**	**0.0321**	**0.0132**	**3.0000e-005**	**9.8300e-003**	**1.4700e-003**	**0.0113**	**5.0500e-003**	**1.3600e-003**	**6.4100e-003**	**0.0000**	**2.5336**	**2.5336**	**8.0000e-004**	**0.0000**	**2.5536**

3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	4.4000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1144	0.1144	0.0000	0.0000	0.1144
Total	**6.0000e-005**	**4.0000e-005**	**4.4000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.1144**	**0.1144**	**0.0000**	**0.0000**	**0.1144**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.8300e-003	0.0000	9.8300e-003	5.0500e-003	0.0000	5.0500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8400e-003	0.0321	0.0132	3.0000e-005		1.4700e-003	1.4700e-003		1.3600e-003	1.3600e-003	0.0000	2.5336	2.5336	8.0000e-004	0.0000	2.5536
Total	**2.8400e-003**	**0.0321**	**0.0132**	**3.0000e-005**	**9.8300e-003**	**1.4700e-003**	**0.0113**	**5.0500e-003**	**1.3600e-003**	**6.4100e-003**	**0.0000**	**2.5336**	**2.5336**	**8.0000e-004**	**0.0000**	**2.5536**

3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	4.4000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1144	0.1144	0.0000	0.0000	0.1144
Total	**6.0000e-005**	**4.0000e-005**	**4.4000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.1144**	**0.1144**	**0.0000**	**0.0000**	**0.1144**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1431	1.0068	0.8497	1.3900e-003		0.0577	0.0577		0.0557	0.0557	0.0000	115.3353	115.3353	0.0222	0.0000	115.8896
Total	**0.1431**	**1.0068**	**0.8497**	**1.3900e-003**		**0.0577**	**0.0577**		**0.0557**	**0.0557**	**0.0000**	**115.3353**	**115.3353**	**0.0222**	**0.0000**	**115.8896**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.2700e-003	0.0878	0.0225	1.9000e-004	4.5400e-003	6.0000e-004	5.1500e-003	1.3100e-003	5.8000e-004	1.8900e-003	0.0000	18.2623	18.2623	1.0100e-003	0.0000	18.2876
Worker	6.3900e-003	4.7400e-003	0.0483	1.4000e-004	0.0139	1.0000e-004	0.0140	3.7100e-003	9.0000e-005	3.8000e-003	0.0000	12.6086	12.6086	3.4000e-004	0.0000	12.6170
Total	**9.6600e-003**	**0.0925**	**0.0708**	**3.3000e-004**	**0.0185**	**7.0000e-004**	**0.0192**	**5.0200e-003**	**6.7000e-004**	**5.6900e-003**	**0.0000**	**30.8708**	**30.8708**	**1.3500e-003**	**0.0000**	**30.9046**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1431	1.0068	0.8497	1.3900e-003		0.0577	0.0577		0.0557	0.0557	0.0000	115.3352	115.3352	0.0222	0.0000	115.8895
Total	**0.1431**	**1.0068**	**0.8497**	**1.3900e-003**		**0.0577**	**0.0577**		**0.0557**	**0.0557**	**0.0000**	**115.3352**	**115.3352**	**0.0222**	**0.0000**	**115.8895**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.2700e-003	0.0878	0.0225	1.9000e-004	4.5400e-003	6.0000e-004	5.1500e-003	1.3100e-003	5.8000e-004	1.8900e-003	0.0000	18.2623	18.2623	1.0100e-003	0.0000	18.2876
Worker	6.3900e-003	4.7400e-003	0.0483	1.4000e-004	0.0139	1.0000e-004	0.0140	3.7100e-003	9.0000e-005	3.8000e-003	0.0000	12.6086	12.6086	3.4000e-004	0.0000	12.6170
Total	**9.6600e-003**	**0.0925**	**0.0708**	**3.3000e-004**	**0.0185**	**7.0000e-004**	**0.0192**	**5.0200e-003**	**6.7000e-004**	**5.6900e-003**	**0.0000**	**30.8708**	**30.8708**	**1.3500e-003**	**0.0000**	**30.9046**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2376	1.7302	1.5430	2.5800e-003		0.0931	0.0931		0.0900	0.0900	0.0000	212.4043	212.4043	0.0394	0.0000	213.3901
Total	**0.2376**	**1.7302**	**1.5430**	**2.5800e-003**		**0.0931**	**0.0931**		**0.0900**	**0.0900**	**0.0000**	**212.4043**	**212.4043**	**0.0394**	**0.0000**	**213.3901**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.9800e-003	0.1485	0.0373	3.5000e-004	8.4400e-003	7.2000e-004	9.1600e-003	2.4400e-003	6.9000e-004	3.1300e-003	0.0000	33.6962	33.6962	1.7400e-003	0.0000	33.7396
Worker	0.0109	7.7700e-003	0.0805	2.5000e-004	0.0259	1.7000e-004	0.0261	6.8900e-003	1.6000e-004	7.0500e-003	0.0000	22.6791	22.6791	5.5000e-004	0.0000	22.6928
Total	**0.0158**	**0.1563**	**0.1178**	**6.0000e-004**	**0.0343**	**8.9000e-004**	**0.0352**	**9.3300e-003**	**8.5000e-004**	**0.0102**	**0.0000**	**56.3753**	**56.3753**	**2.2900e-003**	**0.0000**	**56.4325**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2376	1.7302	1.5430	2.5800e-003		0.0931	0.0931		0.0900	0.0900	0.0000	212.4040	212.4040	0.0394	0.0000	213.3898
Total	**0.2376**	**1.7302**	**1.5430**	**2.5800e-003**		**0.0931**	**0.0931**		**0.0900**	**0.0900**	**0.0000**	**212.4040**	**212.4040**	**0.0394**	**0.0000**	**213.3898**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.9800e-003	0.1485	0.0373	3.5000e-004	8.4400e-003	7.2000e-004	9.1600e-003	2.4400e-003	6.9000e-004	3.1300e-003	0.0000	33.6962	33.6962	1.7400e-003	0.0000	33.7396
Worker	0.0109	7.7700e-003	0.0805	2.5000e-004	0.0259	1.7000e-004	0.0261	6.8900e-003	1.6000e-004	7.0500e-003	0.0000	22.6791	22.6791	5.5000e-004	0.0000	22.6928
Total	**0.0158**	**0.1563**	**0.1178**	**6.0000e-004**	**0.0343**	**8.9000e-004**	**0.0352**	**9.3300e-003**	**8.5000e-004**	**0.0102**	**0.0000**	**56.3753**	**56.3753**	**2.2900e-003**	**0.0000**	**56.4325**

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.2000e-003	0.0423	0.0444	7.0000e-005		2.3500e-003	2.3500e-003		2.1600e-003	2.1600e-003	0.0000	5.8829	5.8829	1.8600e-003	0.0000	5.9295
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.2000e-003**	**0.0423**	**0.0444**	**7.0000e-005**		**2.3500e-003**	**2.3500e-003**		**2.1600e-003**	**2.1600e-003**	**0.0000**	**5.8829**	**5.8829**	**1.8600e-003**	**0.0000**	**5.9295**

3.6 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.5000e-004	1.6000e-003	0.0000	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4500	0.4500	1.0000e-005	0.0000	0.4503
Total	**2.2000e-004**	**1.5000e-004**	**1.6000e-003**	**0.0000**	**5.1000e-004**	**0.0000**	**5.2000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**0.4500**	**0.4500**	**1.0000e-005**	**0.0000**	**0.4503**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.2000e-003	0.0423	0.0444	7.0000e-005		2.3500e-003	2.3500e-003		2.1600e-003	2.1600e-003	0.0000	5.8828	5.8828	1.8600e-003	0.0000	5.9295
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.2000e-003**	**0.0423**	**0.0444**	**7.0000e-005**		**2.3500e-003**	**2.3500e-003**		**2.1600e-003**	**2.1600e-003**	**0.0000**	**5.8828**	**5.8828**	**1.8600e-003**	**0.0000**	**5.9295**

3.6 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.5000e-004	1.6000e-003	0.0000	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4500	0.4500	1.0000e-005	0.0000	0.4503
Total	**2.2000e-004**	**1.5000e-004**	**1.6000e-003**	**0.0000**	**5.1000e-004**	**0.0000**	**5.2000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**0.4500**	**0.4500**	**1.0000e-005**	**0.0000**	**0.4503**

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5724					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2100e-003	8.4200e-003	9.1600e-003	1.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004	0.0000	1.2766	1.2766	1.0000e-004	0.0000	1.2791
Total	**0.5736**	**8.4200e-003**	**9.1600e-003**	**1.0000e-005**		**5.5000e-004**	**5.5000e-004**		**5.5000e-004**	**5.5000e-004**	**0.0000**	**1.2766**	**1.2766**	**1.0000e-004**	**0.0000**	**1.2791**

3.7 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	7.0000e-005	7.4000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.2077	0.2077	1.0000e-005	0.0000	0.2078
Total	**1.0000e-004**	**7.0000e-005**	**7.4000e-004**	**0.0000**	**2.4000e-004**	**0.0000**	**2.4000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.2077**	**0.2077**	**1.0000e-005**	**0.0000**	**0.2078**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5724					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2100e-003	8.4200e-003	9.1600e-003	1.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004	0.0000	1.2766	1.2766	1.0000e-004	0.0000	1.2791
Total	**0.5736**	**8.4200e-003**	**9.1600e-003**	**1.0000e-005**		**5.5000e-004**	**5.5000e-004**		**5.5000e-004**	**5.5000e-004**	**0.0000**	**1.2766**	**1.2766**	**1.0000e-004**	**0.0000**	**1.2791**

3.7 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	7.0000e-005	7.4000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.2077	0.2077	1.0000e-005	0.0000	0.2078
Total	**1.0000e-004**	**7.0000e-005**	**7.4000e-004**	**0.0000**	**2.4000e-004**	**0.0000**	**2.4000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.2077**	**0.2077**	**1.0000e-005**	**0.0000**	**0.2078**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1431	0.6854	1.5872	5.3400e-003	0.4468	4.9900e-003	0.4518	0.1199	4.6700e-003	0.1246	0.0000	489.5198	489.5198	0.0188	0.0000	489.9909
Unmitigated	0.1431	0.6854	1.5872	5.3400e-003	0.4468	4.9900e-003	0.4518	0.1199	4.6700e-003	0.1246	0.0000	489.5198	489.5198	0.0188	0.0000	489.9909

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	762.24	0.00	0.00	1,200,498	1,200,498
Unenclosed Parking Structure	0.00	0.00	0.00		
Total	762.24	0.00	0.00	1,200,498	1,200,498

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Elementary School	9.50	7.30	7.30	65.00	30.00	5.00	63	25	12
Unenclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Elementary School	0.575198	0.040076	0.193827	0.113296	0.016988	0.005361	0.017552	0.025197	0.002581	0.002349	0.005904	0.000881	0.000789
Unenclosed Parking Structure	0.575198	0.040076	0.193827	0.113296	0.016988	0.005361	0.017552	0.025197	0.002581	0.002349	0.005904	0.000881	0.000789

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	79.0162	79.0162	3.5700e-003	7.4000e-004	79.3258
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	79.0162	79.0162	3.5700e-003	7.4000e-004	79.3258
NaturalGas Mitigated	4.4100e-003	0.0401	0.0337	2.4000e-004		3.0500e-003	3.0500e-003		3.0500e-003	3.0500e-003	0.0000	43.6287	43.6287	8.4000e-004	8.0000e-004	43.8879
NaturalGas Unmitigated	4.4100e-003	0.0401	0.0337	2.4000e-004		3.0500e-003	3.0500e-003		3.0500e-003	3.0500e-003	0.0000	43.6287	43.6287	8.4000e-004	8.0000e-004	43.8879

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Elementary School	817570	4.4100e-003	0.0401	0.0337	2.4000e-004		3.0500e-003	3.0500e-003		3.0500e-003	3.0500e-003	0.0000	43.6287	43.6287	8.4000e-004	8.0000e-004	43.8879
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**4.4100e-003**	**0.0401**	**0.0337**	**2.4000e-004**		**3.0500e-003**	**3.0500e-003**		**3.0500e-003**	**3.0500e-003**	**0.0000**	**43.6287**	**43.6287**	**8.4000e-004**	**8.0000e-004**	**43.8879**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Elementary School	817570	4.4100e-003	0.0401	0.0337	2.4000e-004		3.0500e-003	3.0500e-003		3.0500e-003	3.0500e-003	0.0000	43.6287	43.6287	8.4000e-004	8.0000e-004	43.8879
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**4.4100e-003**	**0.0401**	**0.0337**	**2.4000e-004**		**3.0500e-003**	**3.0500e-003**		**3.0500e-003**	**3.0500e-003**	**0.0000**	**43.6287**	**43.6287**	**8.4000e-004**	**8.0000e-004**	**43.8879**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Elementary School	224276	65.2445	2.9500e-003	6.1000e-004	65.5001
Unenclosed Parking Structure	47340	13.7718	6.2000e-004	1.3000e-004	13.8257
Total		**79.0162**	**3.5700e-003**	**7.4000e-004**	**79.3258**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Elementary School	224276	65.2445	2.9500e-003	6.1000e-004	65.5001
Unenclosed Parking Structure	47340	13.7718	6.2000e-004	1.3000e-004	13.8257
Total		**79.0162**	**3.5700e-003**	**7.4000e-004**	**79.3258**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2199	1.0000e-005	8.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6900e-003	1.6900e-003	0.0000	0.0000	1.8000e-003
Unmitigated	0.2199	1.0000e-005	8.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6900e-003	1.6900e-003	0.0000	0.0000	1.8000e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0258					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1941					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.0000e-005	1.0000e-005	8.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6900e-003	1.6900e-003	0.0000	0.0000	1.8000e-003
Total	**0.2199**	**1.0000e-005**	**8.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.6900e-003**	**1.6900e-003**	**0.0000**	**0.0000**	**1.8000e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0258					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1941					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.0000e-005	1.0000e-005	8.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6900e-003	1.6900e-003	0.0000	0.0000	1.8000e-003
Total	**0.2199**	**1.0000e-005**	**8.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.6900e-003**	**1.6900e-003**	**0.0000**	**0.0000**	**1.8000e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	6.4597	0.0470	1.1600e-003	7.9786
Unmitigated	6.4597	0.0470	1.1600e-003	7.9786

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Elementary School	1.43245 / 3.68344	6.4597	0.0470	1.1600e-003	7.9786
Unenclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**6.4597**	**0.0470**	**1.1600e-003**	**7.9786**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Elementary School	1.43245 / 3.68344	6.4597	0.0470	1.1600e-003	7.9786
Unenclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**6.4597**	**0.0470**	**1.1600e-003**	**7.9786**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	13.0361	0.7704	0.0000	32.2963
Unmitigated	13.0361	0.7704	0.0000	32.2963

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Elementary School	64.22	13.0361	0.7704	0.0000	32.2963
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Total		**13.0361**	**0.7704**	**0.0000**	**32.2963**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Elementary School	64.22	13.0361	0.7704	0.0000	32.2963
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Total		**13.0361**	**0.7704**	**0.0000**	**32.2963**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Appendix D
Biological Survey Report

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

February 13, 2019
Project No. 1902-0021

School Site Solutions, Inc.
2015 H Street
Sacramento, CA 95811

Attention: John Dominguez

Subject: Biological Survey Report for the John Gill School Modernization Project

Dear Mr. Dominguez:

Padre Associates, Inc., under contract to the School Site Solutions, Inc. has completed a desktop study and preliminary reconnaissance survey of the proposed modernization project (Project) at the John Gill Elementary School.

1.0 PROJECT DESCRIPTION

The Project involves the modernization of an existing school campus that includes the demolition of existing buildings for replacement with a new administration and classroom building. The Project does not include any development on previously undeveloped land or expansion of the existing developed footprint; however, the Project will require the removal of 41 trees within the existing school grounds.

2.0 METHODS

A query of California Natural Diversity Database (CNDDB) and the Biogeographical Information and Observation System (BIOS) to determine if sensitive species and habitats occur in close proximity to the Project (CDFW, 2019) (Attachments 1 and 2). An unofficial species list from the U. S. Fish and Wildlife was acquired and National Wetland Inventory maps and aerial imagery were reviewed to determine if areas of concern could be identified prior to surveys. The Project is in a highly urban area and is more than one mile from the shoreline of the San Francisco Bay and tidally influenced saltmarsh habitat.

A survey of the Project Site and adjacent trees was conducted on January 23, 2019. During field surveys, the site was traversed on foot to search for potential wetland areas, special-status species habitat, or other sensitive biological resources. Trees occurring in the vicinity of the proposed Project Site were surveyed and wildlife species observed during the field surveys were recorded. Because surveys were conducted before the start of nesting season, trees proposed for removal were inspected for evidence of previous season's nests.

3.0 RESULTS

3.1 VEGETATION

The proposed Project Site is entirely within developed lands consisting of the existing school campus. Vegetation proposed for removal as part of the Project consists mainly of non-

native trees and shrubs. No herbaceous vegetation occurs onsite. Based on a review of trees marked for removal on the demolition plan (CAW Architects, 2019), the trees to be removed include: coastal redwood (*Sequoia sempervirens*), cork oak (*Quercus suber*), sycamore (*Platanus* sp.), and Eucalyptus (*Eucalyptus* sp.).

3.2 WILDLIFE

Due to the developed nature of the Project Site, the majority of the wildlife observed onsite were typical species associated with developed or urban areas**.** Species observed on the Project Site include American crow *(Corvus brachyrhynchos)*, California scrub-jay *(Aphelocoma californica)*, house sparrow (*Passer domesticus*), house finch (*Haemorhous mexicanus*), ruby-crowned kinglet (*Regulus calendula*), and yellow-rumped warbler (*Setophaga coronate*). A turkey vulture (*Cathartes aura*) was also seen soaring over the Project Site. Western gray squirrels (*Sciurus griseus*) were observed within trees onsite. No previous seasons' nests were observed within trees.

3.3 WETLANDS

No wetlands were mapped onsite by National Wetland Inventory (USFWS, 2019) or observed during field surveys.

3.4 SPECIAL-STATUS SPECIES

No special-status species were observed onsite during field surveys, and the review of CNDDB and BIOS did not indicate recorded occurrences of special-status species on or near the Project (Attachment 2). The San Francisco gartersnake (*Thamnophis sirtalis tetrataenia)* occurs within the Palo Alto USGS 7.5-minute quadrangle and appears within all queries of the quadrangle regardless of project location; however, this species would not occur onsite due to the lack of suitable habitat. The USFWS species list identified several federally-listed species that could occur within the region of the Project, however, suitable habitat is not present onsite for any of the federally listed species. An analysis of the likelihood of occurrence for each species identified within CNDDB or the USFWS List was conducted for this Project Site on the basis of species ranges, previous observations, contemporary sightings, and presence of suitable habitat elements on the Site. Table 1 includes the likelihood of occurrence analysis.

Three sensitive raptors, White-tailed kite (*Elanus leucurus*), Cooper's hawk (*Accipiter cooperii*) and sharp-shinned hawk (*Accipiter striatus*) have the potential to nest within trees onsite.

Table 1. Special-Status Species Potentially Occurring in the Vicinity of the John Gill Elementary School Modernization Project

Scientific Name	Common Name	Status[1]	Habitat	Likelihood of Occurrence	Rationale
PLANTS					
Acanthomintha obovata ssp. duttonii	San Mateo thornmint	FE, SE, 1B.1	Chaparral and valley and foothill grassland in serpentine soils at elevations between 150 and 900 feet elevation. Blooms from April to June	None	No suitable habitat is present at the Project Site.
Amsinckia lunaris	Bent-flowered fiddleneck	CNPS 1B.2	Cismontane woodland and valley and foothill grassland that blooms from March-June at 0 to 1600 feet elevation.	None	No suitable habitat is present at the Project Site.
Cirsium fontinale var. fontinale	Crystal Springs fountain thistle	FE, SE, 1B.1	Cismontane woodland, valley and foothill grasslands, Chaparral (openings), and Serpentinite seeps, at elevations between 125 and 525 feet. Blooms from May to October.	None	No suitable habitat is present at the Project Site.
Hesperolinon congestum	Marin dwarf-flax	FT, ST, CNPS 1B.1	Serpentinite soil in chaparral and valley and foothill grassland. Blooms from April–July between 15 to 1100 feet elevation	None	No suitable habitat is present at the Project Site.
Trifolium amoenum	two-fork clover	FT, CNPS 1B.1	Coastal bluff scrub and valley and foothill grassland. Blooms from April–June from 15 to 1250 feet elevation	None	No suitable habitat is present at the Project Site.
INVERTEBRATES					
Callophrys mossii bayensis	San Bruno elfin butterfly	FE	Coastal bluffs and rocky slopes. Feeds on plants in the Crassulaceae family.	None	No suitable habitat is present at the Project Site.

Table 1. Special-Status Species Potentially Occurring in the Vicinity of the John Gill Elementary School Modernization Project

Scientific Name	Common Name	Status[1]	Habitat	Likelihood of Occurrence	Rationale
Euphydryas editha bayensis	Bay checkerspot butterfly	FT	Shallow soils derived from serpentine. Primary host plants are *Plantago erecta*, *Castilleja densiflora*, and *Castilleja exserta*.	None	No suitable habitat is present at the Project Site.
FISHES					
Hypomesus transpacificus	Delta smelt	FT, SE	Sacramento and San Joaquin River Delta	None	No suitable habitat is present at the Project Site.
AMPHIBIANS					
Ambystoma californiense	California tiger salamander	FT, ST	Seasonal pools and stockponds for breeding habitat. Needs underground refuges, especially ground squirrel burrows as upland habitat.	None	No suitable habitat is present at the Project Site.
Rana draytonii	California red-legged frog	FT, CSC	Found in marshes, lakes, reservoirs, ponds, slow moving segments of streams, and other usually permanent water in lowlands, foothill woodlands, and grasslands. Requires aquatic habitat with extensive emergent vegetation.	None	No suitable habitat is present at the Project Site.
REPTILES					
Chelonia mydas	Green sea turtle	FT	Green turtles are generally found in fairly shallow waters (except when migrating) inside reefs, bays, and inlets	None	No suitable habitat is present at the Project Site.
Thamnophis sirtalis tetrataenia	San Francisco gartersnake	FE, SE	Densely vegetated ponds near an open hillside where they can sun themselves, feed, and find cover in rodent burrows	None	No suitable habitat is present at the Project Site.

Table 1. Special-Status Species Potentially Occurring in the Vicinity of the John Gill Elementary School Modernization Project

Scientific Name	Common Name	Status[1]	Habitat	Likelihood of Occurrence	Rationale
BIRDS					
Accipiter cooperii	Cooper's hawk	M, WL	Dense tree stands or patchy woodland habitat and a frequent visitor of urban areas with suitable trees.	Low-Moderate	Suitable nesting habitat is present onsite. No previous year's nests were observed at the Project Site; however, suitable nest trees occur onsite and are proposed for removal.
Accipiter striatus	Sharp-shinned hawk	M, WL	Typically builds nests within woodland habitat where they forage on small birds. Species is a frequent visitor of urban areas with suitable trees.	Low-Moderate	Suitable nesting habitat is present onsite. No previous year's nests were observed at the Project Site; however, suitable nest trees occur onsite and are proposed for removal.
Aquila chrysaetos	Golden eagle	M, FP, BCC	Forages over open grasslands, savannahs, and deserts. Nests in large trees or cliffs.	None	No suitable nesting or foraging habitat is present at the Project Site.
Brachyramphus marmoratus	Marbled murrelet	M, FT, SE	Nests in dense shady forests are generally characterized by large trees with large branches for use as nest platforms	None	No suitable habitat is present at the Project Site.
Charadrius alexandrines nivosus	western snowy plover	M, FT, CSC	Nests on sandy beaches and dunes by creating a shallow depression as a nest, using driftwood, rocks, or bushes as cover	None	No suitable habitat is present at the Project Site.
Elanus leucurus	White-tailed kite	M, FP	Scattered oaks and river bottomlands or marshes next to deciduous woodland. Forages over grasslands, marshes, and oak savannas close to isolated, dense-topped trees for nesting and perching.	Low-Moderate	Suitable nesting habitat is present onsite. No previous year's nests were observed at the Project Site; however, suitable nest trees occur onsite and are proposed for removal.
Rallus obsoletus obsoletus	California Ridgway's rail	M, FE, SE, FP	Requires marshland or sloughs with direct tidal influence.	None	Suitable marsh habitat does not occur within one mile of the Project Site.

Table 1. Special-Status Species Potentially Occurring in the Vicinity of the John Gill Elementary School Modernization Project

Scientific Name	Common Name	Status[1]	Habitat	Likelihood of Occurrence	Rationale
Sternula antillarum browni	California least tern	M, FE, SE, FP	Breeds in the San Francisco Bay Area but overwinters in southern Mexico and Central America. Breeds on sandy coastal beaches, estuaries, lagoons, bays, and along freshwater lakes near the coast.	None	No suitable habitat is present at the Project Site.
MAMMALS					
Reinthrodontomys raviventris	Salt-marsh harvest mouse	FE, SE, FP	Salt marshes with dense pickleweed cover.	None	No suitable habitat is present at the Project Site.

[1] Status:
FE = Federal Endangered
FT = Federal Threatened
FC = Federal Candidate
SE = California State Endangered
ST = California State Threatened

Rare Plant Rank 1B.1 = Threatened in California and elsewhere, seriously threatened in California
Rare Plant Rank 1B.2 = Threatened in California and elsewhere, moderately threatened in California
CSC = California Species of Special Concern
FP = CDFW Fully Protected
FSS = USFS Sensitive Species
BCC = USFWS Bird of Conservation Concern
WL-CDFW Watchlist
M= Federal Migratory Bird Treaty Act

4.0 CONCLUSIONS AND RECOMMENDATIONS

In accordance with the Board of Education Resolution No. 13, the John Gill School Modernization Project is exempt from City and County zoning ordinances, including the City of Redwood City Tree Ordinance. Therefore, tree surveys and tree removal permits consistent with the requirements of the Redwood City Tree Ordinance are not required for tree removal associated with modernization of the school site.

A reconnaissance-level survey for biological resources was conducted within the proposed Project Site and no wetlands, Waters of the U.S. or special-status species habitat was observed; therefore, the modernization project will have no significant impact on special-status species or sensitive and regulated habitat.

Trees onsite, both those planned for removal and those that are retained, could provide nesting habitat for raptors or other birds protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code. Following are recommendations to minimize potential impacts of the Project to nesting raptors and species protected by the MBTA.

Nesting Birds

Trees proposed for removal could provide nesting habitat for birds protected under the MBTA and California Fish and Game Code. Additionally, trees not proposed for removal but located adjacent to proposed impact areas with high levels of construction disturbance, could affect the breeding success of birds (particularly raptors) protected under the MBTA and California Fish and Game codes (Sections 3503, 3503.5, and 3800). These laws and regulations prohibit the take, possession, or destruction of birds, their nests, or eggs. Disturbance that causes nest abandonment and/or loss of reproductive effort could be considered a “take.”

The following measures are recommended to avoid or mitigate project impacts to protected nesting bird species:

- Schedule tree removal and construction activities to begin prior to the beginning of nesting activity (March 1) or after fledging (August 15).
- If this is infeasible, conduct pre-construction surveys between March 1 and August 15 in potential nesting habitat to identify nest sites. Surveys should be conducted within one week of tree removal and the start of construction to identify active nests prior to the initiation of construction activities. If an active raptor nest is observed within 350 feet of the Project Site, contact California Department of Fish and Wildlife (CDFW) for guidance and/or establish a 350-foot buffer around the nest tree. If a passerine bird nest is observed within 100 feet of the Project Site, contact CDFW for guidance and/or establish a 100-foot buffer around the nest tree. If construction activities cannot be prohibited within the established buffers until young have fledged consultation with CDFW should be conducted for a reduced buffer zone based on nesting phenology, site conditions, and recommendation(s) of a biological monitor. Prohibit construction activities in the buffer zone until the young have fledged.

Thank you for the opportunity to work with you on this Project, and please call me if you have any questions regarding these findings

Sincerely,

Padre Associates, Inc.



Kevin Crouch
Project Biologist

Attachments: 1. CNDDB Query Summary Table

2. BIOS Map of Special-Status Species Occurrences

5.0 LITERATURE CITED

California Department of Fish and Game. 2019. California Natural Diversity Data Base (CNDDB) RAREFIND-4 Query and BIOS map queries for species occurrences within one mile of the John Gill School Modernization Project Site. California Department of Fish and Game. Sacramento, CA.

CAW Architects. 2019. John Gill Elementary School Plan Set, Sheet C3.0 - Demolition Plan. December 12, 2018.

City of Redwood City, 2018. City of Redwood City Municipal Code Chapter 35 Tree Preservation Ordinance.

U.S. Fish and Wildlife Service. 2019. National Wetland Inventory-Wetland Mapper. Website: http://www.fws.gov/wetlands/Data/Mapper.html

U.S. Fish and Wildlife Service, 2019. Unofficial Species List for John Gill Elementary School Modernization Project. Sacramento, CA

ATTACHMENT 1

CNDDB QUERY SUMMARY TABLE

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: BIOS selection

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Acanthomintha duttonii San Mateo thorn-mint	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_UCBBG-UC Berkeley Botanical Garden	170 170	5 S:1	0	0	0	0	1	0	1	0	0	0	1
Amsinckia lunaris bent-flowered fiddleneck	G3 S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive		86 S:1	0	0	0	0	0	1	1	0	1	0	0
Bombus occidentalis western bumble bee	G2G3 S1	None None	USFS_S-Sensitive XERCES_IM-Imperiled	20 20	282 S:1	0	0	0	0	0	1	1	0	1	0	0
Coturnicops noveboracensis yellow rail	G4 S1S2	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern NABCI_RWL-Red Watch List USFS_S-Sensitive USFWS_BCC-Birds of Conservation Concern	10 10	45 S:1	0	0	0	0	0	1	1	0	1	0	0
Dipodomys venustus venustus Santa Cruz kangaroo rat	G4T1 S1	None None		5 5	14 S:1	0	0	0	0	1	0	1	0	0	1	0
Lasiurus cinereus hoary bat	G5 S4	None None	IUCN_LC-Least Concern WBWG_M-Medium Priority		238 S:1	0	0	0	0	0	1	1	0	1	0	0
Thamnophis sirtalis tetrataenia San Francisco gartersnake	G5T2Q S2	Endangered Endangered	CDFW_FP-Fully Protected	300 475	67 S:5	1	2	1	0	0	1	1	4	5	0	0

ATTACHMENT 2

BIOS MAP OF SPECIAL-STATUS SPECIES OCCURRENCES

CNDDB GEOSPATIAL DATA IS CONFIDENTIAL – FIGURE AVAILABLE UPON REQUEST

Appendix E
Resolution No. 13 Exemption from Local Zoning Ordinances

RESOLUTION NO. 13

RESOLUTION OF THE BOARD OF EDUCATION
REDWOOD CITY SCHOOL DISTRICT
EXEMPTION FROM LOCAL ZONING ORDINANCES

WHEREAS, Redwood City School District ("District") is a school district duly organized and validly existing under the laws of the State of California, and whose boundaries include Redwood City and portions of the City of San Carlos, the City of Menlo Park, the Town of Atherton, and unincorporated portions of the San Mateo County;

WHEREAS, District currently maintains the following campuses for educational purposes (referred to collectively herein as "School Sites"):

SCHOOL	ADDRESS
Adelante Spanish Immersion School	3150 Granger Way Redwood City, CA 94061
Clifford Elementary School	225 Clifford Avenue Redwood City, CA 94062
Fair Oaks Community School	2950 Fair Oaks Avenue Redwood City, CA 94063
Garfield Elementary School	3600 Middlefield Road Menlo Park, CA 94025
Hawes Elementary School	909 Roosevelt Avenue Redwood City, CA 94061
Henry Ford Elementary School	2498 Massachusetts Avenue Redwood City, CA 94061
Hoover Elementary School	701 Charter Street Redwood City, CA 94063
John F. Kennedy Middle School	2521 Goodwin Avenue Redwood City, CA 94061
John Gill Elementary School	555 Avenue del Ora Redwood City, CA 94062
McKinley Institute of Technology	400 Duane Street Redwood City, CA 94062
North Star Academy	400 Duane Street Redwood City, CA 94062
Orion Alternative School	815 Allerton Street Redwood City, CA 94063
Roosevelt Elementary School	2223 Vera Avenue Redwood City, CA 94061
Roy Cloud Elementary School	3790 Red Oak Way Redwood City, CA 94062
Selby Lane Elementary School	170 Selby Lane Atherton, CA 94027
Taft Community School	903 10th Avenue Redwood City, CA 94063

WHEREAS, the District may from time to time construct, modernize, and/or renovate certain facilities on the School Sites to provide educational services in order to serve the surrounding community (the "Project");

ATTACHMENT A

WHEREAS, California Government Code Section 53094 authorizes District, by a vote of two-thirds of the members of its Governing Board, to render city or county zoning ordinances inapplicable to the Project and School Sites when used for educational purposes;

WHEREAS, the current and proposed uses of the Project and School Sites is for educational purposes and the Project and School Sites are subject to design review by the Division of the State Architect ("DSA") under California Education Code Section 17280, *et seq.*; and

WHEREAS, District has balanced the interests of the public, including those of the District and those of Redwood City, the City of San Carlos, the City of Menlo Park, the Town of Atherton, and San Mateo County, and determined that the interests of the public are best served by operating the School Sites and commencing and completing the Project according to applicable state laws along with all other educational uses on the School Sites.

NOW THEREFORE, THE GOVERNING BOARD OF THE REDWOOD CITY SCHOOL DISTRICT DOES HEREBY RESOLVE, DETERMINE AND ORDER AS FOLLOWS:

Section 1. That all of the above recitals are correct.

Section 2. That, to the extent applicable for each school included in the School Sites, the District hereby exempts the School Sites from any zoning ordinances of:

(a) Redwood City including, without limitation, Redwood City's Code of Ordinances, Redwood City's General Plan, and related ordinances and regulations which otherwise would be applicable;

(b) The City of San Carlos including, without limitation, the San Carlos Municipal Code, San Carlos' General Plan, and related ordinances and regulations which otherwise would be applicable;

(c) The City of Menlo Park including, without limitation, the Menlo Park Municipal Code, Menlo Park's General Plan, and related ordinances and regulations which otherwise would be applicable;

(d) The Town of Atherton including, without limitation, the Atherton Municipal Code, Atherton's General Plan, and related ordinances and regulations which otherwise would be applicable; and

(e) San Mateo County including, without limitation, San Mateo County's Code of Ordinances, San Mateo County's General Plan, and related ordinances and regulations which would otherwise be applicable.

Section 3. That the Superintendent of the Redwood City School District, or his designee, is directed to give written notice to Redwood City, the City of San Carlos, the City of Menlo Park, the Town of Atherton, and San Mateo County as required by Government Code Section 53094 within ten (10) days of this action.

APPROVED, PASSED, AND ADOPTED by the Board of Education of the Redwood City School District at a public meeting duly called and held on this November 9th, 2016, by the following vote:

AYES: 5

NOES: 0

ABSTENTIONS: 0

President

ATTEST:

Clerk

Resolution No. 13

STATE OF CALIFORNIA)
)
SAN MATEO COUNTY)

I, María Díaz-Slocum, do hereby certify that the foregoing is a true and correct copy of Resolution No. 13, which was duly adopted by the Board of Education of the Redwood City School District at the meeting thereof held on the 9 of November, 2016, and that it was so adopted by the following vote:

AYES: 5
NOES: 0
ABSENT: 0
ABSTENTIONS: 0

María Díaz-Slocum
Clerk of the Board of Education

Appendix F
Geotechnical Evaluation and Geologic Hazard Assessment

Geotechnical Evaluation and Geologic Hazard Assessment

John Gill Elementary School
555 Avenue Del Ora
Redwood City, California

Redwood City School District

750 Bradford Street | Redwood City, California 94063

December 11, 2017 | Project No. 402965006







Geotechnical | Environmental | Construction Inspection & Testing | Forensic Engineering & Expert Witness

Geophysics | Engineering Geology | Laboratory Testing | Industrial Hygiene | Occupational Safety | Air Quality | GIS

Ninyo & Moore
Geotechnical & Environmental Sciences Consultants

Ninyo & Moore
Geotechnical & Environmental Sciences Consultants

Geotechnical Evaluation and Geologic Hazard Assessment

John Gill Elementary School
555 Avenue Del Ora
Redwood City, California

Mr. Don Dias
Redwood City School District
750 Bradford Street | Redwood City, California 94063

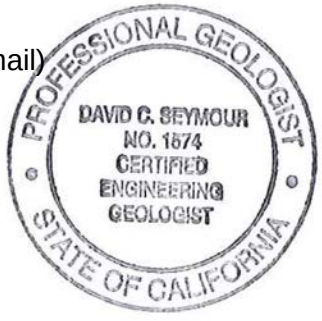
December 11, 2017 | Project No. 402965006

David C. Seymour, PG, CEG
Principal Engineering Geologist

Timothy P. Sneddon, PE, GE
Principal Engineer

DCS/TPS/slt

Distribution: (1) Addressee (via e-mail)





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1 INTRODUCTION

In accordance with your authorization, we have performed a geotechnical evaluation and geologic hazards assessment for the proposed improvements at John Gill Elementary School campus, located at 555 Avenue Del Ora in Redwood City, California (Figure 1). This report presents the findings and conclusions from our geologic hazards assessment, and our geotechnical recommendations for improvements at the site.

2 SCOPE OF SERVICES

Our scope of services included the following:

- Review of readily available background materials, including geologic maps, historical aerial photographs, topographic maps, and geologic and seismic hazard maps.
- Site reconnaissance to observe the general site conditions and to mark the locations for our subsurface exploration.
- Obtained a boring permit from the San Mateo County Environmental Health Services Division.
- Coordination with Underground Service Alert (USA) to locate underground utilities in the vicinity of our subsurface exploration.
- Subsurface exploration consisting of five (5) solid-stem auger borings. A representative of Ninyo & Moore logged the subsurface conditions exposed in the borings and collected bulk and relatively undisturbed soil samples for laboratory testing.
- A geophysical seismic survey, utilizing the Refraction Microtremor (ReMi) technique to evaluate the variation of seismic shear wave velocity with depth.
- One percolation test at a depth of 2 feet below the existing grade to assess infiltration rates.
- Laboratory testing on selected samples to evaluate in-situ soil moisture content and dry density, grain size distribution, Atterberg limits, expansion index, and soil corrosivity.
- Compilation and engineering analysis of the field and laboratory data, and the findings from our background review.
- Preparation of this report presenting our findings and conclusions regarding the potential geologic hazards and geotechnical conditions at the project site, and our geotechnical recommendations for proposed improvements.

3 SITE DESCRIPTION

The school campus is located in the eastern foothills of the Santa Cruz Mountains overlooking the southern shore of San Francisco Bay in the City of Redwood City, California (Figure 1). The John Gill school campus is bounded on the north by Myrtle Street, on the east by Jefferson Avenue, on the south by Avenue Del Ora, and residential homes on the west. The campus rests on the northeastern flank of Eagle Hill, which is a small, northwesterly trending isolated knoll. Elevations across the campus vary from about 35 feet along Myrtle Street to 80 feet above mean sea level in the main parking lot in the center of the campus. Slopes between buildings and play areas vary in height from about 10 to 20 feet, with slope ratios of 2:1 to 4:1 and flatter. The Hetch Hetchy aqueduct lies beneath Avenue Del Ora and the southwestern corner of the campus, but not beneath the location of the proposed improvements. The proposed two-story classroom building site is located at 37.474226 degrees North latitude and 122.241522 degrees West longitude at an elevation of about 70 feet above mean sea level.

According to the school's website, the school was dedicated in 1932 and named after the district superintendent at the time, Mr. John Gill. Aerial photographs from 1937 show the main building and two other buildings off of Avenue Del Ora along with pad areas for future buildings on the campus. No tonal lineaments suggestive of active faulting or evidence of landsliding were observed in the 1937 photographs or subsequent photographs (see References).

4 PROJECT DESCRIPTION

Based on our review of preliminary plans for the project (CAW, 2017), the proposed improvements will consist of a new two-story classroom building, two new shade structures, and retaining walls (Figure 2). The new classroom building will be L-shaped with a footprint of about 16,500 square feet and constructed on the existing grade. The shade structures will be rectangular in shape with footprints of about 1,200 square feet and 2,400 square feet. Related site improvements will include new underground utilities and rerouting existing buried utilities that are located in the areas of the proposed new structures.

5 FIELD EXPLORATION AND LABORATORY TESTING

Our field exploration for this study included a site reconnaissance, subsurface exploration conducted on October 03, 2017, and a geophysical seismic survey on October 11, 2017. The subsurface exploration consisted of five (5) solid-stem auger borings, one percolation test, and a ReMi seismic refraction survey. The approximate locations of the exploration locations are shown on Figure 2.

The solid-stem auger borings were advanced to depths of about 6 to 20 feet below the existing grade. Borings B-1 through B-4 were drilled through existing asphalt pavement in the parking lot area and in blacktop play areas. Boring B-5 was drilled in a landscape area at the location of a proposed shade structure. A representative of Ninyo & Moore logged the subsurface conditions exposed in the borings and collected relatively undisturbed and bulk soil samples from the borings. The samples were then transported to our geotechnical laboratory for testing. The borings were backfilled with grout after excavation in accordance with the boring permit. Descriptions of the subsurface materials encountered are presented in the following sections. Detailed logs of the borings are presented in Appendix A.

Laboratory testing of soil samples recovered from the borings included tests to evaluate in-situ soil moisture content and dry density, grain size distribution, Atterberg limits, expansion index, and soil corrosivity. The results of the in-situ moisture content and dry density tests are presented on the boring logs in Appendix A.

A percolation test was performed on October 3, 2017 at the location shown on Figure 2. The percolation test results and procedures utilized are presented in Appendix C. The test hole was backfilled with the soil cuttings shortly after completion of the test.

A seismic survey using passive surface wave techniques was performed at the site on October 11, 2017. The purpose of the study was to characterize the shear wave velocity of the subsurface materials at the site. The passive source method included refraction micro-tremor array measurements (ReMi) and consisted of a singular line of seismic data collection. The location of the seismic survey line is shown on Figure 2. The method provided a shear wave (S-wave) velocity profile to a depth of approximately 100 feet below the ground surface for seismic site classification (CBSC, 2016). The seismic study results are provided in Appendix D, along with a summary of the field methods and analytical procedures utilized.

6 GEOLOGIC AND SUBSURFACE CONDITIONS

Our findings regarding regional geologic setting, site geology, subsurface conditions, and groundwater conditions at the subject site are provided in the following sections.

6.1 Regional Geologic Setting

The campus is located west of San Francisco Bay in the Coast Ranges geomorphic province of California. The Coast Ranges are comprised of several mountain ranges and structural valleys formed by tectonic processes commonly found around the Circum-Pacific belt. Basement rocks have been sheared, faulted, metamorphosed, and uplifted, and are separated by thick blankets of Cretaceous and Cenozoic sediments that fill structural valleys and line continental margins.

The San Francisco Bay Area has several ranges that trend northwest, parallel to major strike-slip faults such as the San Andreas, Hayward, and Calaveras (Figure 3). Major tectonic activity associated with these and other faults within this regional tectonic framework consists primarily of right-lateral, strike-slip movement.

6.2 Site Geology

A regional geologic map prepared by Brabb et al. (1998) indicates that the campus is underlain by bedrock of the Cretaceous/Jurassic age Franciscan Complex (Figure 4). Bedrock units exposed at the campus include sandstone, along with a band of greenstone that cuts across the western portion of the site. During our site reconnaissance, a small greenstone outcrop was observed along the western side of the main driveway that leads to the central parking lot. Outcrops of lithic sandstone were also observed on the slopes on the northeastern side of the campus and on the slope that borders the western side of the grass playfield. Earlier geologic mapping by Pampeyan (1993) shows similar conditions, including outcrops of sandstone and greenstone. During our subsurface evaluation we encountered sandstone, shale, and serpentinite, which is not included on the regional geologic maps.

6.3 Subsurface Conditions

The following sections provide a generalized description of the geologic units encountered during our subsurface evaluation. More detailed descriptions are presented on the logs in Appendix A. A cross section depicting our interpretation of the subsurface conditions is presented as Figure 5.

6.3.1 Asphalt Pavement and Fill

The asphalt pavement section encountered in Borings B-1 through B-4 varied from about 3.5 to 4 inches of asphaltic concrete over 3.5 to 5 inches of aggregate base. Fill was encountered in the borings from the ground surface to a depth of approximately 2 feet, and generally consisted of gray and brown, moist, medium dense, clayey sand and stiff, sandy fat and lean clay. The fills encountered are considered undocumented and may be thicker in other areas of the site.

6.3.2 Soil

Residual soil was encountered in the borings to depths of approximately 3 to 5 feet below the ground surface. The soil developed by weathering of the underlying bedrock generally consisted of gray and brown, moist, medium dense, clayey sand and stiff, sandy fat and lean clay.

6.3.3 Bedrock

Bedrock was encountered in Borings B-1 through B-5 at depths ranging from approximately 3½ to 6 feet below the ground surface. The bedrock encountered in our borings consisted of weathered sandstone, serpentinite, and shale. Greenstone is exposed along the western side of the campus and may underlie other portions of the campus. The weathered bedrock units encountered are considered very stiff/hard soil and classified as weak rock. Drill refusal was encountered in Borings B-2 through B-5 at depths ranging from approximately 6 to 14½ feet below the ground surface. The on-site bedrock units may be difficult to excavate using conventional earthwork equipment and may generate oversize material that is not suitable for use as engineered fill.

6.4 Groundwater

Groundwater was not encountered in the borings drilled for this evaluation to the maximum depth explored of 20 feet. Fluctuations in the groundwater level across the site and over time may occur, however, due to seasonal precipitation, variations in topography or subsurface hydrogeologic conditions, or as a result of changes to nearby irrigation practices or groundwater pumping. In addition, seeps may be encountered at elevations above the observed groundwater levels due to perched groundwater conditions, leaking pipes, preferential drainage, or other factors not evident at the time of our exploration.

7 GEOLOGIC HAZARDS AND CONSIDERATIONS

This study considered a number of issues relevant to the proposed construction, including seismic hazards, flood hazards, landsliding and slope stability, naturally occurring asbestos, settlement of compressible soil layers from static loading, unsuitable materials, excavation characteristics, soil corrosivity, and expansive soils. These issues are discussed in the following subsections.

7.1 Seismic Hazards

The seismic hazards considered in this study include the potential for ground rupture due to faulting, seismic ground shaking, liquefaction, dynamic settlement, seismic slope stability, and tsunamis and seiches. These potential hazards are discussed in the following subsections.

7.1.1 Historical Seismicity

The site is located in a seismically active region. Figure 3 presents the location of the site relative to the epicenters of historic earthquakes with magnitudes of 5.5 or more from 1800 to 2000. Records of historic ground effects related to seismic activity (e.g. liquefaction, sand

boils, lateral spreading, ground cracking) compiled by Knudsen et al. (2000), indicate that no ground effects related to historic seismic activity have been reported for the site vicinity.

7.1.2 Faulting and Ground Surface Rupture

There are numerous recognized faults in northern California. Selected characteristics, as evaluated by the 2007 Working Group on California Earthquake Probabilities (WGCEP, 2008), for recognized and postulated faults (Caltrans, 2017) near the site are presented in Table 1. The fault characteristics in the table are presented in order of decreasing peak ground acceleration (PGA) based on a deterministic seismic hazard analysis utilizing the Chiou & Youngs (2008) and Campbell & Bozorgnia (2008) attenuation relationships.

Table 1 – Parameters for Nearby Faults

Fault	ID	Type	Max Moment Magnitude	Distance to Site (kilometers)
San Andreas (Peninsula)	134	Strike Slip	8	5.5
San Andreas (Santa Cruz Mtns)	158	Strike Slip	8	25.5
San Gregorio (San Gregorio)	127	Strike Slip	7.4	19.3
Monte Vista-Shannon	154	Reverse	6.4	10.6
Cascade	153	Reverse	6.7	15.1
San Andreas (North Coast)	80	Strike Slip	8	49.4
Hayward (South)	137	Strike Slip	7.3	24.7
Silver Creek	148	Reverse	6.9	19.7
Hayward (North)	123	Strike Slip	7.3	31.1
Zayante-Vergeles Upper	162	Strike Slip	7	32.8

The site is not located within an Alquist-Priolo Earthquake Fault Zone established by the state geologist (CGS, 2007) to delineate regions of potential ground surface rupture adjacent to active faults. As defined by the California Geological Survey (CGS), active faults are faults that have caused surface displacement within Holocene time, or within approximately the last 11,000 years (CGS, 2007). The closest fault rupture hazard zone is the one associated with the San Andreas Fault, which is located approximately three miles southwest of the site. Based on these conditions, the probability of damage from surface fault rupture is considered to be low.

7.1.3 Strong Ground Motion

Based on historic activity, the potential for future strong ground motion at the site is considered significant. Seismic design criteria to address ground shaking are provided in Section 9.2. The 2016 California Building Code (CBC) specifies that the potential for liquefaction and soil strength loss be evaluated, where applicable, for the Maximum

Considered Earthquake Geometric Mean (MCEG) peak ground acceleration with adjustment for site class effects in accordance with the American Society of Civil Engineers (ASCE) 7-10 Standard. A site-specific ground motion hazard analysis was performed in accordance with Section 21.5 of ASCE 7-10 to evaluate the MCEG peak ground acceleration. The results of our site-specific ground motion hazard analysis indicate that the MCEG peak ground acceleration with adjustment for site class effects (PGA_M) is 0.688g. The assumptions and models utilized for this analysis are listed on Figure 7 and the calculations are presented in Appendix E.

7.1.4 Liquefaction and Strain Softening

The strong vibratory motions generated by earthquakes can trigger a rapid loss of shear strength in saturated, loose, granular soils of low plasticity (liquefaction) or in wet, sensitive, cohesive soils (strain softening). Liquefaction and strain softening can result in a loss of foundation bearing capacity, or lateral spreading of sloping or unconfined ground. Liquefaction can also generate sand boils, leading to subsidence at the ground surface. Liquefaction (or strain softening) is generally not a concern at depths more than 50 feet below ground surface. The site is not located within a State of California (CGS, 2006) liquefaction hazard zone. Our subsurface exploration generally encountered bedrock at a depth of about 5 feet. We encountered granular soil above the bedrock; however, based on liquefaction triggering susceptibility criteria presented by Boulanger and Idriss (2006) and Bray and Sancio (2006) and the fines content, in-site moisture content, and Atterberg Limits test results of the granular soil, the near-surface soils are not susceptible to liquefaction. Based on the CGS (2006) evaluation and the subsurface conditions encountered, liquefaction and related hazards are not a design consideration for this project.

Based on the blow counts and laboratory test results, the sandy clay soils encountered during our subsurface exploration are not considered sensitive. As such, we do not regard seismically induced strain-softening behavior as a design consideration.

7.1.5 Dynamic Settlement

The strong vibratory motion associated with earthquakes can also dynamically compact loose granular soil, leading to surficial settlements. Dynamic settlement is not limited to the near surface environment, and may occur in both dry and saturated sand and silt. Cohesive soil is not typically susceptible to dynamic settlement.

Our subsurface exploration generally encountered fill and native soil consisting of clayey sand and sandy lean clay to a depth of about 5 feet overlying bedrock. Based on the subsurface conditions encountered, we do not regard dynamic settlement as a design consideration.

7.1.6 Seismic Slope Stability

The campus is not located within a seismic hazard zone for earthquake-induced landslides (CGS, 2006). The campus does include several slopes that divide classroom buildings and playground areas; however, the slopes are typically less than 20 feet in height and relatively flat with slope ratios of 2:1 (horizontal to vertical) or flatter. Based on these factors, we do not regard seismic slope stability as a design consideration for this project.

7.1.7 Tsunamis and Seiches

Tsunamis are long wavelength seismic sea waves (long compared to ocean depth) generated by the sudden movements of the ocean floor during submarine earthquakes, landslides, or volcanic activity. The project location is not within a tsunami evacuation area as shown on the Tsunami Evacuation Planning Map for the County of San Mateo (State of California, 2009).

Seiches are waves generated in a large enclosed body of water. Based on the inland location and the lack of large enclosed bodies of water near the site, the potential for damage due to tsunamis or seiches is not a design consideration.

7.2 Flood Hazards

Our review of the flood hazard map on the Association of Bay Area Governments [ABAG] (2017) website indicates that the campus lies in an area outside the 0.2 percent annual chance flood plain (500 year flood zone).

7.3 Landsliding and Slope Stability

Regional landslide inventory maps (CGS, 2006; Ellen et al., 1997; Wentworth, et al., 1997) indicate that mapped landslides do not underlie the site or the vicinity. The campus does include several slopes that divide classroom buildings and playground areas; however, the slopes are typically less than 20 feet in height and relatively flat with slope ratios of 2:1 (horizontal to vertical) or flatter. We did not observe any evidence of past landslide movement in the historical aerial photographs that we reviewed or during our site reconnaissance. Based on the existing site conditions and our review, we do not regard slope stability or landsliding as design considerations for this project.

7.4 Naturally Occurring Asbestos

According to State of California guidelines established by the California Department of Toxic Substances and Control (2004 and 2005), a Preliminary Environmental Assessment (PEA) is recommended for school sites that are located within a 10-mile radius of any rock formation that may contain naturally occurring asbestos (NOA). During our subsurface evaluation we encountered serpentinite bedrock, which contains NOA minerals including chrysotile. Based on these conditions, the school district should consider conducting a PEA prior to foundation construction and grading operations.

7.5 Static Settlement

We understand that the proposed improvements will be relatively light, and that significant changes to the site grade are not proposed. We anticipate, therefore, that settlement due to sustained loading by the proposed improvements will be tolerable, provided that those improvements are supported on shallow foundations designed in accordance with the recommendations in this report.

7.6 Unsuitable Materials

Fill materials that were not placed and compacted under the observation of a geotechnical engineer, or fill materials lacking documentation of such observation, are considered undocumented fill. Undocumented fill is unsuitable as a bearing material below foundations due to the potential for differential settlement resulting from variable support characteristics or the potential inclusion of deleterious materials. Undocumented fill was encountered up to depths of about 2 feet below the ground surface during our subsurface exploration. Recommendations for remedial grading, subgrade preparation and foundation embedment recommendations are provided to mitigate the undocumented fill concerns.

Soil containing roots or other organic matter are not suitable as fill or subgrade material below foundations, pavements, or engineered fill. Recommendations for clearing and grubbing to remove vegetative matter in soil during site preparation are provided.

7.7 Excavation Characteristics

We anticipate that the proposed improvements will involve excavations for foundations, trenches, and to remove undocumented fill materials and unsuitable surficial soils. We anticipate that heavy earthmoving equipment in good working condition should be able to make the proposed excavations in fill and soil materials. Shallow bedrock units may also be encountered that may be difficult to excavate using conventional earthmoving equipment. Rock breaking equipment may be needed to excavate foundations and in areas where cuts are

needed to make proposed grades. In addition, oversize materials may be generated during excavation operations that may not meet the criteria for use as engineered fill. The bedrock materials and associated soils may contain NOA that may require offsite disposal to a facility that accepts NOA bearing materials.

Excavations in the fill may encounter obstructions consisting of debris, rubble, abandoned structures, or over-sized materials that may require special handling or demolition equipment for removal.

Near-vertical temporary cuts in the near surface deposits up to 4 feet in depth should remain stable for a limited period of time. However, sloughing of the materials exposed on the excavation sidewall may occur, particularly if the excavation extends near the groundwater level, encounters granular soil, is exposed to water, or if the sidewall is disturbed during construction operations. Excavation subgrade may become unstable if exposed to wet conditions. Recommendations for excavation stabilization are presented. Excavated materials may also be wet and need to be dried out before reuse as fill.

7.8 Corrosive/Deleterious Soil

An evaluation of the corrosivity of the on-site material was conducted to assess the impact to concrete and metals. The corrosion impact was evaluated using the results of limited laboratory testing on samples obtained during our subsurface study. Laboratory testing to quantify pH, resistivity, chloride, and soluble sulfate contents was performed on a sample of the near-surface soil. The results of the corrosivity tests are presented in Appendix B. California Department of Transportation (Caltrans) defines a corrosive environment as an area within 1,000 feet of brackish water, or where the soil contains more than 500 parts per million (ppm) of chlorides, sulfates of 0.2 (2,000 ppm) percent or more, or pH of 5.5 or less (Caltrans, 2012). Based on these criteria, the site does not meet the definition of a corrosive environment. Ferrous metal will still undergo corrosion on site, but special mitigation measures are not needed. The criteria used to evaluate the deleterious nature of soil on concrete, and recommendations from the American Concrete Institute (ACI) for sulfate exposure classes are presented in Table 2. Based on these criteria, the soil on site is defined as Exposure Class S1.

Table 2 – Criteria for Deleterious Soil on Concrete			
Sulfate Content Percent by Weight	**Exposure Class**	**Maximum Water to Cement Ratio**	**Minimum 28-day Compressive Strength**
0.0 to 0.1	S0	N/A	2,500
0.1 to 0.2	S1	0.50	4,000
0.2 to 2.0	S2	0.45	4,500
> 2.0	S3	0.45	4,500

Reference: American Concrete Institute (ACI) Committee 318 Table 19.3.1.1 and Table 19.3.2.1 (ACI, 2014)

7.9 Expansive Soils

Some clay minerals undergo volume changes upon wetting or drying. Unsaturated soils containing those minerals will shrink/swell with the removal/addition of water. The heaving pressures associated with this expansion can damage structures and flatwork. Laboratory testing was performed on a select sample of the near-surface soil to evaluate the expansion index. The tests were performed in general accordance with the American Society of Testing and Materials (ASTM) Standard D 4829 (Expansion Index). The results of our laboratory testing indicate that the expansion index of the near-surface soil is 120, which is consistent with a high expansion characteristic. To reduce the potential for differential movement and distress to the proposed improvements due to shrink/swell behavior, recommendations are provided for remedial grading, foundation embedment depths, and subgrade preparation.

7.10 Infiltration Characteristics

Ninyo & Moore performed percolation testing to further evaluate the rate of infiltration on site for design of storm water management systems. The percolation test procedures utilized are presented in Appendix C. The test results, presented in Appendix C and summarized in Table 3 indicate that the infiltration rate of the near surface soil on site is very slow. Due to the variability of subsurface materials encountered during our exploration, variability in subsurface infiltration should be anticipated.

Table 3 – Percolation Test Results				
Test (Boring)	Test Depth (ft)	Subsurface Conditions	Percolation Rate (in/hr)	Infiltration Rate[1] (in/hr)
P1	2	Lean Clay	3.9	0.4

[1] Infiltration rate is percolation rate adjusted by a reduction factor to exclude percolation through sides of test hole.

8 CONCLUSIONS

Based on our review of the referenced background data, our site field reconnaissance, subsurface evaluation, and laboratory testing, it is our opinion that proposed construction is feasible from a geotechnical standpoint. Geotechnical considerations include the following:

- Our subsurface exploration encountered undocumented fill, soil, and bedrock. Fill was encountered to depths of up to about 2 feet. The fill generally consisted of gray and brown, moist, medium dense, clayey sand and stiff, sandy fat and lean clay. The soil generally consisted of gray and brown, moist, medium dense, clayey sand and stiff, sandy fat and lean clay. Bedrock was encountered at depths of about 3½ to 6 feet and generally consisted of weathered sandstone, shale, and serpentinite. Greenstone is also exposed on the campus and may underlie areas of proposed construction.

- Undocumented fill and soil containing roots or other organic matter are not suitable as subgrade below foundations or engineered fill.

- Groundwater was not encountered in our boring to the maximum depth explored of about 20 feet. Variation and fluctuation in groundwater levels should be anticipated as discussed in Section 6.4.

- The site could experience a relatively large degree of ground shaking during a significant earthquake on a nearby fault. Seismic design criteria are presented in Section 9.2.

- Liquefaction, seismic strain softening, dynamic settlement, and other liquefaction-related hazards are not design considerations based on the subsurface conditions encountered.

- Tsunamis, seiches, and ground surface rupture due to faulting are not design considerations based on the location of the project.

- Excavations that remain unsupported and exposed to water, or encounter seepage, or granular soil may be unstable and prone to sloughing. Recommendations for excavation stabilization are provided.

- Excavations in the fill may encounter debris, rubble, oversize material, buried objects, or other potential obstructions.

- Bedrock materials encountered during construction may be difficult to excavate with conventional earthmoving equipment and could generate oversize material that may require offsite disposal. Furthermore, the bedrock may contain NOA and require special handling and disposal requirements.

- The site is not in a flood hazard zone.

- Our percolation testing at a depth of 2 feet below the existing grade indicates that the infiltration rate of the near surface soils is very slow.

- Naturally occurring asbestos (NOA) in the natural soils and underlying bedrock may be present based on the conditions encountered. The school district should consider conducting a PEA prior to excavation of foundations and grading.

- Static settlement should be tolerable for the proposed improvements provided that the proposed structures are supported on foundations that conform with our recommendations and fill placement to raise grades is less than 2 feet in height.

- Based on the results of our limited soil corrosivity tests during this study and Caltrans corrosion guidelines (2012), the site does not meet the definition of a corrosive environment.

- Expansion Index testing indicates that the near-surface soil on site has a high expansion characteristic. Recommendations are provided for remedial grading, foundation embedment depths, and subgrade preparation to reduce the potential for expansive soil movement below proposed improvements.

9 RECOMMENDATIONS

The following sections present our geotechnical recommendations for the design and construction of the proposed improvements. The project improvements should be designed and constructed in accordance with these recommendations, applicable codes, and appropriate construction practices.

9.1 Earthwork

The earthwork should be conducted in accordance with the relevant grading ordinances having jurisdiction and the following recommendations. The geotechnical engineer should observe earthwork operations. Evaluations performed by the geotechnical engineer during the course of field operations may result in new recommendations, which could supersede the recommendations in this section.

9.1.1 Pre-Construction Conference

We recommend that a pre-construction conference be held to discuss the grading recommendations presented in the report. The owner and/or their representative, the architect, the engineer, Ninyo & Moore, and the contractor should be in attendance to discuss project schedule and earthwork requirements.

9.1.2 Site Preparation

Site preparation should begin with the removal of vegetation, utility lines, debris and other deleterious materials from areas to be graded. Tree stumps and roots should be removed to such a depth that organic material is generally not present. Clearing and grubbing should

extend to the outside of the proposed excavation and fill areas. Rubble and excavated materials that do not meet criteria for use as fill should be disposed of in an appropriate landfill. Existing utilities to be abandoned should be removed, crushed in place, or backfilled with grout.

Excavations resulting from removal of buried utilities, tree stumps, or obstructions should be backfilled with compacted fill in accordance with the recommendations in the following sections.

9.1.3 Subgrade Observations

Prior to placement of fill, erection of forms or placement of reinforcement for foundations, the client should request an evaluation of the exposed subgrade by Ninyo & Moore. Materials that are considered unsuitable shall be excavated under the observation of the geotechnical engineer in accordance with the recommendations in this section or the field recommendations of the geotechnical engineer.

Unsuitable materials include, but may not be limited to dry, loose, soft, wet, expansive, organic, or compressible natural soil; and undocumented or otherwise deleterious fill materials. Unsuitable materials should be removed from trench bottoms and below bearing surfaces to a depth at which suitable foundation subgrade, as evaluated in the field by the geotechnical engineer, is exposed.

9.1.4 Remedial Grading - Building

In order to provide suitable support for the proposed new building, we recommend that the existing undocumented fills and underlying soil be over-excavated and replaced with compacted, engineered fill. The over-excavation should extend to a depth of 5 feet below the planned subgrade elevation or 2 feet below the bottom of footings, whichever is deeper. The lateral limits of over excavations should extend a distance of 5 feet or more beyond the limits of the structural footprint of the building.

To reduce the potential for differential movement and distress to the proposed improvements due to shrink/swell behavior, a zone of material with low expansion potential should be created by placing fill with low expansion characteristics to a depth of 30 inches below building slabs-on-grade. The zone of low expansion fill should consist of select, low-expansion import fill conforming with Section 9.1.7. Alternatively, the on-site soil may be chemically treated by mixing the soil with lime as described in Section 9.1.6 to reduce the expansion characteristic and create the zone of low-expansion material. The aggregate base or capillary break gravel under building slabs may be considered as part of the zone

of low expansion material. The zone of exclusion/removal should be detailed on the construction plans to reduce the potential that these recommendations are overlooked during construction bidding.

The removal and recompaction work should consist of 1) excavating to the depths discussed above, 2) scarifying to a depth of approximately 8 inches, moisture-conditioning, and compacting the exposed subgrade soils as per Section 9.1.8, and 3) replacing the excavated materials with compacted fill per Section 9.1.9. Excavated soils that can be processed to meet the general criteria in Section 9.1.7 can be re-used as general fill.

9.1.5 Remedial Grading – Exterior Flatwork

Laboratory testing indicates that the near-surface soil on site has a high expansion characteristic. To reduce the potential for differential movement and distress to the proposed improvements due to shrink/swell behavior, a zone of material with low expansion potential should be created by removing the existing soil, as-needed, and placing fill with low expansion characteristics below building flatwork. The zone of low expansion fill should consist of select, low-expansion import fill conforming with Section 9.1.7. Alternatively, the on-site soil may be chemically treated by mixing the soil with lime as described in Section 9.1.6 to reduce the expansion characteristic and create the zone of low-expansion material.

The lateral limits of over excavations should extend a distance of 2 feet or more beyond the limits of the flatwork. The zone of low expansion material should extend to a depth of 18 inches below exterior flatwork. The aggregate base under exterior flatwork may be considered as part of the zone of low expansion material. The zone of exclusion/removal should be detailed on the construction plans to reduce the potential that these recommendations are overlooked during construction bidding.

The removal and recompaction work should consist of 1) excavating to the depths discussed above, 2) scarifying to a depth of approximately 8 inches, moisture-conditioning, and compacting the exposed subgrade soils as per Section 9.1.8, and 3) replacing the excavated materials with compacted fill per Section 9.1.9. Excavated soils that can be processed to meet the general criteria in Section 9.1.7 can be re-used as general fill. Alternatively, the on-site soil may be chemically treated by mixing the soil with lime as described in Section 9.1.6.

9.1.6 Chemical Treatment

The on-site soil may be chemically treated with quicklime to reduce the expansion characteristic of the soil as an alternative to importing select fill. The quicklime should conform with ASTM standard C977.

On-site materials containing roots or other organic matter are not suitable for chemical treatment and should be stripped from the area at which the treatment is to be performed. The chemical treatment should be performed by an experienced contractor that specializes in the chemical treatment of soil. The chemical agent should be proportioned and spread with a mechanical spreader and mixed into the soil on a mixing table or in place to produce consistent distribution of the agent within the treated layer. The depth of mixing should not exceed 18 inches per lift, or the capacity of the mixer if less. Precautions to reduce the potential for dusting of quicklime, such as scheduling or suspending operations to avoid windy weather, should be taken. Casting or tailgating of the chemical agent should not be permitted. The mixer should be equipped with a rotary cutting/mixing assembly, grade checker, and an automatic water distribution system. Mixing or spreading operations should not be performed during inclement weather or when the ambient temperature is less than 35 degrees Fahrenheit, or during foggy or rainy weather. Adjacent passes of the mixer should overlap by 4 inches or more.

To reduce the expansive soil characteristic, quicklime should be mixed into the soil at a rate of 3 percent or more by dry weight of soil. The plasticity index of the treated soil should be 12 or less. Mixing and pulverizing should continue until the treated soil does not contain untreated soil clods larger than 1 inch and the quantity of untreated soil clods retained on the No. 4 sieve is less than 40 percent of the dry soil mass. Water should be added as-needed during the mixing process to achieve moisture content above the optimum, as evaluated by ASTM D1557, for the lime-soil mixture. The lime-soil mixture should be re-mixed following a 16-hour mellowing period after the initial mixing. The lime-soil mixture should be compacted within 3 days after initial mixing per Section 9.1.9.

9.1.7 Material Recommendations

Materials used during earthwork operations should comply with the requirements listed in Table 4. Materials should be evaluated by the geotechnical engineer for suitability prior to use. The contractor should notify the geotechnical consultant 72 hours prior to import of materials or use of on-site materials to permit time for sampling, testing, and evaluation of the proposed materials. On-site materials may need to be dried out before re-use as fill.

The contractor should be responsible for the consistency of import material brought to the site.

Table 4 – Recommended Criteria for Materials

Material and Use	Source	Requirements[1,2]
Select (Low Expansion) Fill: - below building slabs or flatwork	Import	Close-graded with 35 percent or more passing No. 4 sieve and either: Expansion Index of 50 or less, Plasticity Index of 12 or less, or less than 10 percent, by dry weight, passing No. 200 sieve
	On-site borrow	Treated with lime per Section 9.1.6
Select Structure Backfill: - behind retaining walls[5]	Import	Sand Equivalent 20 or more 100 percent passing 3-inch sieve 35 to 100 percent passing No. 4 Sieve 20 to 100 percent passing No. 30 sieve
General Fill: - for uses not otherwise specified	Import	As per Select (Low Expansion) Fill
	On-site borrow	No additional requirements[1]
Controlled Low Strength Material (CLSM)	Import	CSS[4] Section 19-3.02F
Permeable Aggregate - capillary break gravel	Import	Open-graded, clean, compactable crushed rock or angular gravel; nominal size ¾ inch or less
Aggregate Base	Import	Class II; CSS[4] Section 26-1.02
Pipe/Conduit Bedding and Pipe Zone Material -material below pipe invert to 12 inches above pipe	Import	90 to 100 percent (by mass) should pass No. 4 sieve, and 5 percent or less should pass No. 200 sieve
Trench Backfill - above bedding material	Import or on-site borrow	As per general fill and excluding rock/lumps retained on 4-inch sieve or 2-inch sieve in top 12 inches

[1] In general, fill should not consist of pea-gravel and should be free of rocks or lumps in excess of 6-inches diameter, trash, debris, roots, vegetation or other deleterious material.
[2] In general, import fill should be tested or documented to be non-corrosive[3] and free from hazardous materials in concentrations above levels of concern.
[3] Non-corrosive as defined by the Corrosion Guidelines (Caltrans, 2012).
[4] CSS is California Standard Specifications (Caltrans, 2015).
[5] Placed above a plane rising up and away from the heel of the wall at a 1:1 angle.

9.1.8 Subgrade Preparation

Subgrade in trenches and below slabs, footings, flatwork, pavement, or fill, should be prepared as per the recommendations in Table 5. Prepared subgrade should be maintained

in a moist (but not saturated) condition by the periodic sprinkling of water prior to placement of additional overlying fill or construction of footings and slabs.

Table 5 – Subgrade Preparation Recommendations

Subgrade Location	Preparation Recommendations
Below Footings	• Perform remedial grading as per Section 9.1.4. • Scarify and moisture condition exposed subgrade as-needed to achieve a moisture content 2 points or more above the optimum as evaluated by ASTM D1557, then compact exposed subgrade as per Section 9.1.9. • Keep in moist condition by sprinkling water.
Below Slabs and Flatwork	• Perform remedial grading as per Sections 9.1.4 and 9.1.5. Scarify 8 inches then moisture condition and compact as per Section 9.1.9 if in-place lime treatment is not performed. • Keep in moist condition by sprinkling water.
Below Fill	• After clearing and grubbing per Section 9.1.2, check for unsuitable materials as per Section 9.1.3. • Scarify 8 inches then moisture condition and compact as per Section 9.1.9. • Keep in moist condition by sprinkling water.
Utility Trenches	• After clearing per Section 9.1.2, check for unsuitable materials as per Section 9.1.3. • Remove or compact loose/soft material.

Subgrade that has been permitted to dry out and loosen, or develop desiccation cracking should be scarified, moisture-conditioned, and recompacted as per the requirements above. A thin layer (approximately 3 inches) of lean concrete or controlled low strength material (CLSM) may be poured over prepared subgrade for footings or slabs to maintain the appropriate moisture condition during erections of forms and placement of reinforcing steel.

9.1.9 Fill Placement and Compaction

Fill and backfill should be compacted in horizontal lifts in conformance with the recommendations presented in Table 6. The allowable uncompacted thickness of each lift of fill depends on the type of compaction equipment utilized, but generally should not exceed 8 inches in loose thickness.

Table 6 – Fill Placement and Compaction Recommendations			
Fill Type	**Location**	**Compacted Density[1]**	**Moisture Content[2]**
Subgrade	Below slabs, flatwork, and footings and in locations not already specified	90 percent	+ 2 percent or above
Bedding and Pipe Zone Fill	Material below invert to 12 inches above pipe or conduit	90 percent	Near Optimum
Trench Backfill	Top 18 inches below finish subgrade for areas subject to vehicular loading	95 percent	+ 2 percent or above
	In locations not already specified	90 percent	+ 2 percent or above
Select or General Fill	In locations not already specified	90 percent	+ 2 percent or above
Lime-treated subgrade or fill	In locations not already specified	95 percent	At or above optimum
Aggregate Base	Below slabs and hardscape	95 percent	Near Optimum

Notes:
1 Expressed as percent relative compaction or ratio of field density to reference density (typically on a dry density basis for soil and aggregate and on a wet density basis for lime treated subgrade). The reference density of soil, lime-treated subgrade, and aggregate should be evaluated by ASTM D 1557.
2 Target moisture content at compaction relative to the optimum as evaluated by ASTM D 1557.

Compacted fill should be maintained in a moist (but not saturated) condition by the periodic sprinkling of water prior to placement of additional overlying fill or construction of footings and slabs. Fill that has been permitted to dry out and loosen, or develop desiccation cracking should be scarified, moisture conditioned, and recompacted as per the requirements above.

9.1.10 Excavation Stabilization

Excavations, including foundation and utility excavations, should be stabilized by shoring sidewalls or laying slopes back in accordance with the Excavation Rules and Regulations (29 Code of Federal Regulations [CFR], Part 1926) stipulated by the Occupational Safety and Health Administration (OSHA). Table 7 lists the OSHA material type classifications and corresponding allowable temporary slope layback inclinations for soil deposits that may be encountered on site. Alternatively, a shoring system conforming to the OSHA Excavation Rules and Regulations (29 CFR Part 1926) may be used to stabilize excavation sidewalls during construction. The lateral earth pressures listed in Table 7 may be used to design or select an internally-braced shoring system, or trench shield, conforming to the OSHA guidelines. Our recommendations for lateral earth pressures and allowable slope gradients

are based upon the limited subsurface data provided by our exploratory borings and reflect the influence of the environmental conditions that existed at the time of our exploration. Excavation stability, material classifications, allowable slopes, and shoring pressures should be re-evaluated and revised, as-needed, during construction. Excavations, shoring systems and the surrounding areas should be evaluated daily by a competent person for indications of possible instability or collapse. Dewatering pits or sumps should be used to depress the groundwater level (if encountered) below the bottom of the excavation.

Table 7 – OSHA Material Classifications and Allowable Slopes

Formation	OSHA Classification	Allowable Temporary Slope[1,2,3]	Lateral Earth Pressure on Shoring[4] (psf)
Fill & Soil (above groundwater)	Type C	1 ½ h:1v (34°)	80×D + 72

Notes:

1 Allowable slope for excavations less than 20 feet deep. Excavation sidewalls in cohesive soil may be benched to meet the allowable slope criteria (measured from the bottom edge of the excavation). The allowable bench height is 4 feet. The bench at the bottom of the excavation may protrude above the allowable slope criteria.
2 In layered soil, layers shall not be sloped steeper than the layer below.
3 Temporary excavations less than 5 feet deep may be made with vertical side slopes and remain unshored if judged to be stable by a competent person (29 CFR, Part 1926.650).
4 'D' is depth of excavation for excavations up to 20 feet deep. Includes a surface surcharge equivalent to two feet of soil.

The shoring system should be designed or selected by a suitably qualified individual or specialty subcontractor. The shoring parameters presented in this report are preliminary design criteria, and the designer should evaluate the adequacy of these parameters and make appropriate modifications for their design. We recommend that the contractor take appropriate measures to protect workers. OSHA requirements pertaining to worker safety should be observed.

Excavations made in close proximity to existing structures may undermine the foundation of those structures and/or cause soil movement related distress to the existing structures. Stabilization techniques for excavations in close proximity to existing structures will need to account for the additional loads imposed on the shoring system and appropriate setback distances for temporary slopes. The geotechnical engineer should be consulted for additional recommendations if the proposed excavations cross below a plane extending down and away from the foundation bearing surfaces of the adjacent structure at an angle of 2:1 (horizontal to vertical) from the bottom edge of the footing, or if the proposed excavation is less than 18 inches from the face of the footing.

The excavation bottoms may become unstable and subject to pumping under heavy equipment loads if the excavation subgrade is exposed to water. The contractor should be prepared to stabilize the bottom of the excavations. In general, unstable bottom conditions may be mitigated by scarifying the subgrade and aerating the soil to achieve a moisture content near the optimum, dewatering to depress groundwater levels below the bottom of the excavation, over excavating to a suitable depth and replacing the wet material with suitable fill, compacting a layer of crushed rock fill into the subgrade, or using geogrid to stabilize additional fill. Specific recommendations for excavation stabilization will be influenced by the nature of the excavation and the conditions encountered during construction.

9.1.11 Construction Dewatering

Water intrusion into the excavations may occur as a result of groundwater seepage or surface runoff. The contractor should be prepared to take appropriate dewatering measures in the event that water intrudes into the excavations. Sump pits, trenches, or similar measures should be used to depress the water level below the bottom of the excavation. Considerations for construction dewatering should include anticipated drawdown, volume of pumping, potential for settlement, and groundwater discharge. Disposal of groundwater should be performed in accordance with the guidelines of the Regional Water Quality Control Board.

9.1.12 Utility Trenches

Trenches constructed for the installation of underground utilities should be stabilized in accordance with our recommendations in Section 9.1.10. Utility trenches should be backfilled with materials that conform to our recommendations in Section 9.1.7. Trench backfill, bedding, and pipe zone fill should be compacted in accordance with Section 9.1.9 of this report. Bedding and pipe zone fill should be shoveled under pipe haunches and compacted by manual or mechanical, hand-held tampers. Trench backfill should be compacted by mechanical means. Densification of trench backfill by flooding or jetting should not be permitted.

To reduce potential for moisture intrusion into the building envelope, we recommend plugging utility trenches at locations where the trench excavations cross under the building perimeter. The trench plug should be constructed of a compacted, fine-grained, cohesive soil that fills the cross-sectional area of the trench for a distance equivalent to the depth of the excavation. Alternatively, the plug may be constructed of concrete or CLSM.

9.1.13 Rainy Weather Considerations

We recommend that the construction be performed during the period between approximately April 15 and October 15, to avoid the rainy season. In the event that grading is performed during the rainy season, the plans for the project should be supplemented to include a stormwater management plan prepared in accordance with the requirements of the relevant agency having jurisdiction. The plan should include details of measures to protect the subject property and adjoining off-site properties from damage by erosion, flooding, or the deposition of mud, debris, or construction-related pollutants, which may originate from the site or result from the grading operation. The protective measures should be installed by the commencement of grading, or prior to the start of the rainy season. The protective measures should be maintained in good working order unless the project drainage system is installed by that date and approval has been granted by the building official to remove the temporary devices.

In addition, construction activities performed during rainy weather may impact the stability of excavation subgrade and exposed ground. Temporary swales should be constructed to divert surface runoff away from excavations and slopes. Steep temporary slopes should be covered with plastic sheeting during significant rains. The geotechnical consultant should be consulted for recommendations to stabilize the site as-needed. A thin layer (approximately 3 inches) of lean concrete or CLSM may be poured over prepared subgrade for footings or slabs to maintain the appropriate moisture condition during erections of forms and placement of reinforcing steel.

9.2 Seismic Design Criteria

A site-specific ground motion analysis was performed in accordance Section 1616A.1.3 of the 2016 California Building Code (CBC). The analysis was based on the procedure in Chapter 21 of the American Society of Civil Engineers (ASCE) 7-10 Standard. The design response spectrum based on the site-specific ground motion analysis is presented on Figure 7 and the corresponding seismic design criteria are summarized in Table 8. The spectral ordinates and seismic coefficients based on the mapped values of the risk-targeted spectral response acceleration, consistent with Section 11.4 of ASCE 7-10, are presented in the table for comparison.

Table 8 – 2016 California Building Code Seismic Design Criteria		
Seismic Design Parameter **Evaluated for 37.4742° North Latitude, 122.2415°West Longitude**	**Site Specific**	**Section 11.4 ASCE 7-10**
Site Class		B
Site Coefficient, Fa	---	1.0
Site Coefficient, Fv	---	1.0
Mapped M_{CER} Spectral Response Acceleration at 0.2-second period, S_S	---	1.890g
Mapped M_{CER} Spectral Response Acceleration at 1.0-second period, S_1	---	0.882g
Site-Adjusted M_{CER} Spectral Acceleration at 0.2-second period, S_{MS}	1.718	1.890g
Site-Adjusted M_{CER} Spectral Acceleration at 1.0-second period, S_{M1}	0.836	0.882g
Design Spectral Response Acceleration at 0.2-second Period, S_{DS}	1.145	1.260g
Design Spectral Response Acceleration at 1.0-second Period, S_{D1}	0.558	0.588g
Seismic Design Category for Risk Category I, II, or III		E

9.3 Foundation Recommendations

New buildings may be supported on spread footings with slab-on-grade floors. Foundations should be designed in accordance with structural considerations and the following recommendations. In addition, requirements of the appropriate governing jurisdictions and applicable building codes should be considered in design of the structures.

9.3.1 Spread Footings

Footings bearing on new engineered fill subgrade prepared in accordance with the recommendations in Section 9.1.8 may be designed using the criteria listed in Table 9. The geotechnical engineer should observe the footing excavations to evaluate bearing materials and subgrade condition before the exposed subgrade is covered. Footing bottoms should not be sloped more than 1 unit vertical to 10 units horizontal. Wall footings may be stepped provided that the bearing grade differential between adjacent steps does not exceed 18 inches and the slope of a series of such steps does not exceed 1 unit vertical to 2 units horizontal.

Table 9 – Recommended Bearing Design Parameters for Footings					
Footing	**Sustained Loads**	**Footing Widths**	**Bearing Depth[1]**	**Allowable Bearing Capacity[2]**	**Static Settlement[4]**
Wall Footing	6 kips/foot or less	1½ feet or more	1½ feet or more	3,000 psf	1 inch total ½ inch differential over 30 feet
Column Footing	80 kips or less	2 feet or more	1½ feet or more	3,500 psf	1 inch total ½ inch differential over 30 feet

Notes:
[1] Below the adjacent finish grade and the existing grade.
[2] Net allowable bearing capacity in pounds per square foot. Listed value includes a Factor of Safety of 3 or more. Allowable bearing capacity may be increased by one-third when considering loads of short duration such as wind or seismic loads.

Footing settlement due to static loads may be further evaluated using a modulus of subgrade reaction. Recommended values for the modulus of subgrade reaction are provided in Table 10. The designer may interpolate between the values in the table for intermediate footing widths.

Table 10 – Footing Modulus of Subgrade Reaction					
Footing[1]	**Footing Width**				
	1½ feet	**2 feet**	**3 feet**	**5 feet**	**10 feet**
Wall Footing	92 pci	66 pci	41 pci	25 pci	---
Column Footing[2]	---	126 pci	78 pci	46 pci	23 pci

Notes:
[1] Assumes bearing depth of 18 inches below adjacent finish grade.
[2] Assumes square footing shape for columns
[3] Modulus of Subgrade Reaction in units of pounds per cubic inch.

The spread footings should be reinforced with deformed steel bars as detailed by the project structural engineer. Continuous footings should be reinforced with at least four, No. 4 steel reinforcing bars, two placed near the top and two placed near the bottom of the footings. Where footings are located adjacent to utility trenches or other excavations, the

bottom edge of the adjacent trench/excavation at a 2:1 (horizontal to vertical) angle above the bottom edge of the footing. Footings should be deepened or excavation depths reduced as-needed.

A friction coefficient of 0.30 may be assumed for evaluating frictional resistance to lateral loads. A lateral bearing pressure of 300 psf per foot of depth up to 3,000 psf may be used to evaluate the resistance of footings to lateral loads for level ground conditions. The lateral bearing pressure should be neglected to a depth of 1 foot where the ground adjacent to the foundation is not covered by a slab or pavement. The lateral resistance can be taken as the sum of the frictional resistance and passive resistance, provided the passive resistance does not exceed one-half of the total allowable resistance. The friction coefficient and passive lateral bearing pressure should be considered ultimate values. The lateral bearing pressure may be increased by one-third when considering loads of short duration such as wind or seismic forces.

The weight of the material above a plane rising up and away from the bottom edges of the footings at 20 degrees off plumb may be considered, along with the weight of the footing and the material over the footing, when evaluating footing resistance to uplift. A unit weight of 115 pounds per cubic foot (pcf) for soil or aggregate and 150 pcf for normal weight concrete may be assumed for this evaluation.

9.3.2 Slabs-on-Grade

Building floor slabs should be designed by the project structural engineer based on the anticipated loading conditions. The slab should be reinforced with deformed steel bars. We recommend that masonry briquettes or plastic chairs be used to aid in the correct placement of slab reinforcement in the upper half of the slab. Refer to Section 9.6 for the recommended concrete cover over reinforcing steel. A vapor retarder is recommended in areas where moisture-sensitive floor coverings or conditioned environments are anticipated. See Section 9.7 for vapor retarding system recommendations. Where a vapor retarding system is not used, slabs should be constructed on 6 inches, or more, of aggregate base conforming to Section 9.1.7 and placed in accordance with Section 9.1.9. Joints consistent with ACI guidelines (ACI, 2016) may be constructed at periodic intervals to reduce the potential for random cracking of the slab.

9.3.3 Drilled Piers for Shade Structures

9.3.3.1 Axial Load Resistance

Drilled piers for minor structures embedded 5 to 20 feet below grade may be designed for an allowable side friction of 150 psf to evaluate resistance to downward axial loads and 100 psf per foot depth for upward axial loads. The downward side friction values may be increased by 50 psf and the upward side friction values may be increased by 34 psf for each foot of embedment below 5 feet. The allowable skin friction includes a factor of safety of 2 for downward loading and 3 for upward loading. The allowable side friction may be increased by one-third when considering loads of short duration such as wind or seismic loads. The spacing between adjacent piers should be equivalent to three pier diameters, or more to mitigate reduction due to group effects. Structures supported on shallow pier foundations should be designed for a total and differential settlement due to sustained loads of approximately ½ inch and ¼ inch over a horizontal distance of 30 feet.

9.3.3.2 Lateral Load Resistance

A lateral bearing pressure of 100 pounds per square foot (psf) per foot depth up to 1,500 psf may be used to evaluate resistance to lateral loads and overturning moments in accordance with Section 1806 of the 2016 CBC. The allowable lateral bearing pressure may be increased by one-third for wind or seismic load combinations, and by an additional factor of two for structures that can accommodate ½ inch of lateral deflection of the top of the pier foundation.

Drilled piers in a row perpendicular to the direction of lateral loading do not need to be reduced for group effects where the center-to-center pier spacing is equivalent to 3 or more pier diameters. A reduction in the lateral resistance due to group effects should be considered for piers in a column parallel to the direction of loading where the center-to-center spacing between adjacent piers in the column is less than eight pier diameters. The reduction in lateral resistance due to group effects for piers in a column parallel to the direction of loading is influenced by the number of piers in the column and the spacing between piers. The efficiency or available lateral resistance per pier are presented in Table 11 for piers in a column parallel to the direction of loading at various spacings.

Table 11 – Group Efficiency for Lateral Loading Parallel to Load			
Piers in Column [1]	3B Pier Spacing [2]	5B Pier Spacing [2]	8B Pier Spacing [2]
2	60 percent	76 percent	100 percent
3	50 percent	70 percent	100 percent
4	45 percent	67 percent	100 percent

Notes:
[1] Number of piers in column parallel to the direction of the anticipated lateral load.
[2] Center to center pier spacing in direction of the anticipated load where 'B' is the pile diameter.

9.3.3.3 Construction Considerations

Drilled pier excavations should be cleaned of loose material prior to pouring concrete. Drilled pier excavations that encounter groundwater or cohesionless soil may be unstable and may need to be stabilized by temporary casing or use of drilling mud. Standing water should be removed from the pier excavation or the concrete should be delivered to the bottom of the excavation, below the water surface, by tremie pipe. Casing should be removed from the excavation as the concrete is placed. Concrete should be placed in the piers in a manner that reduces the potential for segregation of the components.

9.4 Retaining Walls

Gravity and cantilever semi-gravity walls retaining new engineered fill up to 10 feet in height may be designed for active or at-rest equivalent fluid earth pressures of 45 or 65 psf per foot depth, respectively, for level backfill conditions. Walls that yield or deflect may be designed for active earth pressures. Wall deflection equivalent to about 1 percent of wall height may be needed to reduce at-rest earth pressures to active earth pressures. For rising backfill conditions, the active or at-rest equivalent fluid earth pressures may be increased by 1 psf per foot depth per degree of inclination. Seismic earth pressures do not need to be considered for retaining walls with retained heights of 6 feet or less or for walls designed for restrained, at-rest conditions. For wall heights of more than 6 feet in retained height, an additional equivalent fluid pressure of 20 psf per foot depth may be used to evaluate the seismic earth pressure on yielding retaining walls.

Walls retaining level ground should be designed to resist construction or live load surcharges on the backfill. The lateral earth pressure due to a backfill surcharge of 240 psf should be a uniform horizontal surcharge of 80 psf for yielding conditions and 120 psf for at-rest conditions. An

additional backfill surcharge and lateral earth pressure for adjacent footings should be considered, as applicable, where the adjacent footings bear above an imaginary plane that rises up and away from the bottom edge of the wall at a 2:1 (horizontal to vertical) gradient.

Backfill behind walls should consist of select fill, in accordance with Section 9.1.7. The select fill should be placed above a plane rising up and away from the heel of the wall at a 1:1 angle and compacted in accordance with the recommendations in Section 9.1.9.

Hydrostatic pressures may be neglected, provided that suitable drainage of the retained soil is provided. The retained soil should be drained by weep holes, or a subdrain at the base of the wall stem consisting of ¾-inch crushed rock wrapped in filter fabric (Mirafi 140N, or equivalent). The subdrain should be capped by a pavement or 12 inches of native soil and drained by a perforated pipe (Schedule 40 polyvinyl chloride pipe, or similar). The pipe should be sloped at 1 percent or more to discharge at an appropriate outlet away from the wall. Alternatively, geocomposite drain panels (Miradrain 6000XL, or similar) placed against the back of the wall may be used to supplement a smaller subdrain located near the base of the wall. Measures to reduce the rate of moisture or vapor intrusion through the wall may be advisable for walls where the discoloration resulting from moisture intrusion would be undesirable. Such measures might include use of concrete with a low water-to-cementitious-materials ratio, and/or the placement of an asphalt emulsion or 10-mil thick plastic membrane to the back surface of the wall.

Lateral forces may be resisted by friction at the base of the wall footing and passive earth pressure acting on the embedded wall, wall footing, or wall key, if present. Semi-gravity walls on level ground may be designed for a passive equivalent fluid lateral earth pressure of 300 psf per foot depth presuming a lateral deflection equivalent to 2 percent of the wall embedment depth to mobilize the passive condition. Passive earth pressure should be neglected to a depth of 1 foot below the ground surface when evaluating lateral load resistance where the ground surface is not covered by pavement or flatwork. Gravity and semi-gravity cantilever walls may be designed for a coefficient of friction of 0.30 to resist lateral loads and a net allowable bearing capacity of 2,000 psf for a 12-inch, or more, footing width and 18 inches, or more, of embedment below the adjacent grade. The allowable bearing capacity may be increased by one-third for seismic load combinations.

Walls should be designed to withstand a total static settlement of 1 inch with a differential of ½ inch over a 30-foot span. We recommend that the wall and the wall footing be reinforced. Footings should be designed by the structural engineer based on the anticipated loading and usage. We recommend that masonry briquettes or plastic chairs be used to aid in the correct

placement of footing reinforcement. Refer to Section 9.6 for the recommended concrete cover over reinforcing steel.

9.5 Exterior Flatwork

Remedial grading should be performed below exterior flatwork per Section 9.1.4. Concrete walkways and other exterior flatwork not subject to vehicular loading should be 4 inches thick (or more) over 6 inches of aggregate base. The concrete thickness should be increased to 6 inches at driveways. Appropriate jointing of concrete flatwork can encourage cracks to form at joints, reducing the potential for crack development between joints. Joints should be laid out in a square pattern at consistent intervals. Contraction and construction should be detailed and constructed in accordance with the guidelines of ACI Committee 302 (ACI, 2016). The lateral spacing between contraction joints should be 8 feet or less for a 4-inch thick slab.

Distributed reinforcing steel may be utilized to reduce the potential for differential slab movement, should cracking occur between joints. The distributed reinforcing steel should be terminated about 6 inches from contraction joints and should consist of No. 3 deformed bars at 18 inches on center, both ways. Slabs reinforced with distributed steel should be 5 inches thick (or more). To reduce the potential for differential slab movement across joints, the distributed steel may be extended through the joints. This improvement will be balanced by a reduction in the functionality of the contraction joint to encourage crack formation at joints. Masonry briquettes or plastic chairs should be used to maintain the position of the reinforcement in the upper half of the slab with 1½ inches of cover over the steel.

9.6 Concrete

Laboratory testing indicated the soil on site is defined as Exposure Class S1 in regards to the concentration of sulfate and corresponding potential for sulfate attack on concrete. Based on these test results and variability in the on-site soil and the potential future use of reclaimed water at the site, we recommend that Type II/V or Type V cement be used for concrete structures in contact with soil. In addition, we recommend a water-to-cement ratio of no more than 0.45. A 3-inch thick, or thicker, concrete cover should be maintained over reinforcing steel where concrete is in contact with soil in accordance with recommendations of ACI Committee 318 (ACI, 2014).

9.7 Moisture Vapor Retarder

The migration of moisture through slabs underlying enclosed spaces or overlain by moisture sensitive floor coverings should be discouraged by providing a moisture vapor retarding system between the subgrade soil and the bottom of slabs. We recommend that the moisture vapor

retarding system consist of a 4-inch-thick capillary break, overlain by a 15-mil-thick plastic membrane. The capillary break should be constructed of clean, compacted, open-graded crushed rock or angular gravel of ¾-inch nominal size. To reduce the potential for slab curling and cracking, an appropriate concrete mix with low shrinkage characteristics and a low water-to-cementitious-materials ratio should be specified. In addition, the concrete should be delivered and placed in accordance with ASTM C94 with attention to concrete temperature and elapsed time from batching to placement, and the slab should be cured in accordance with the ACI Manual of Concrete Practice (ACI, 2016), as appropriate. The plastic membrane should conform to the requirements in the latest version of ASTM Standard E 1745 for a Class A membrane. The bottom of the moisture barrier system should be higher in elevation than the exterior grade, if possible. Positive drainage should be established and maintained adjacent to foundations and flatwork.

Where the exterior grade is at a higher elevation than the moisture vapor retarding system (including the capillary break layer), consideration should be given to constructing a subdrain around the foundation perimeter. The subdrain should consist of ¾-inch crushed rock wrapped in filter fabric (Mirafi 140N, or equivalent). The subdrain should be capped by a pavement or 12 inches of native soil and drained by a perforated pipe (Schedule 40 polyvinyl chloride pipe, or similar). The pipe should be sloped at 1 percent or more to discharge at an appropriate outlet away from the foundation. The pipe should be located below the bottom elevation of the moisture vapor retarding system but above a plane extending down and away from the bottom edge of the foundation at a 2:1 (horizontal to vertical) gradient.

9.8 Surface Drainage and Site Maintenance

Surface drainage on the site should generally be provided so that water is diverted away from structures and is not permitted to pond. Positive drainage should be established adjacent to structures to divert surface water to an appropriate collector (graded swale, v-ditch, or area drain) with a suitable outlet. Drainage gradients should be 2 percent or more a distance of 5 feet or more from the structure for impervious surfaces and 5 percent or more a distance of 10 feet or more from the structure for pervious surfaces. Slope, pad, and roof drainage (from adjacent structures) should be collected and diverted to suitable discharge areas away from structures or other slopes by non-erodible devices (e.g., gutters, downspouts, concrete swales, etc.). Graded swales, v-ditches, or curb and gutter should be provided at the site perimeter to restrict flow of surface water onto and off of the site. Slopes should be vegetated or otherwise armored to reduce potential for erosion of soil. Drainage structures should be periodically cleaned out and repaired, as-needed, to maintain appropriate site drainage patterns.

Landscaping adjacent to foundations should include vegetation with low-water demands and irrigation should be limited to that which is needed to sustain the plants. Trees should be restricted from the areas adjacent to foundations a distance equivalent to the canopy radius of the mature tree. Bioretention areas should not be located within a distance of 20 feet from structure foundations.

Care should be taken by the contractor during grading to preserve any berms, drainage terraces, interceptor swales or other drainage devices on or adjacent to the project area. Drainage patterns established at the time of grading should be maintained for the life of the project. The property owner and maintenance personnel should be made aware that altering drainage patterns might be detrimental to wall performance.

9.9 Review of Construction Plans

The recommendations provided in this report are based on preliminary design information for the proposed construction. We recommend that a copy of the plans be provided to Ninyo & Moore for review before bidding to check the interpretation of our recommendations and that the designed improvements are consistent with our assumptions. It should be noted that, upon review of these documents, some recommendations presented in this report might be revised or modified to meet the project requirements.

9.10 Construction Observation and Testing

The recommendations provided in this report are based on subsurface conditions encountered in relatively widely spaced exploratory borings. During construction, the geotechnical engineer or his representative in the field should be allowed to check the exposed subsurface conditions. During construction, the geotechnical engineer or his representative should be allowed to:

- Observe preparation and compaction of subgrade.
- Observe mitigation of unsuitable materials by excavation.
- Check and test imported materials prior to use as fill.
- Observe placement and compaction of fill and aggregate base.
- Perform field density tests to evaluate fill and subgrade compaction.
- Observe foundation excavations for bearing materials and cleaning prior to placement of reinforcing steel and concrete.
- Observe condition of water vapor retarding system prior to concrete placement.

The recommendations provided in this report assume that Ninyo & Moore will be retained as the geotechnical consultant during the construction phase of the project. If another geotechnical consultant is selected, we request that the selected consultant provide a letter to the architect and the owner (with a copy to Ninyo & Moore) indicating that they fully understand Ninyo & Moore's recommendations, and that they are in full agreement with the recommendations contained in this report.

10 LIMITATIONS

The field evaluation, laboratory testing, and geotechnical analyses presented in this geotechnical report have been conducted in general accordance with current practice and the standard of care exercised by geotechnical consultants performing similar tasks in the project area. No warranty, expressed or implied, is made regarding the conclusions, recommendations, and opinions presented in this report. There is no evaluation detailed enough to reveal every subsurface condition. Variations may exist and conditions not observed or described in this report may be encountered during construction. Uncertainties relative to subsurface conditions can be reduced through additional subsurface exploration. Additional subsurface evaluation will be performed upon request. Please also note that our evaluation was limited to assessment of the geotechnical aspects of the project, and did not include evaluation of structural issues, environmental concerns, or the presence of hazardous materials.

This document is intended to be used only in its entirety. No portion of the document, by itself, is designed to completely represent any aspect of the project described herein. Ninyo & Moore should be contacted if the reader requires additional information or has questions regarding the content, interpretations presented, or completeness of this document.

This report is intended for design purposes only. It does not provide sufficient data to prepare an accurate bid by contractors. It is suggested that the bidders and their geotechnical consultant perform an independent evaluation of the subsurface conditions in the project areas. The independent evaluations may include, but not be limited to, review of other geotechnical reports prepared for the adjacent areas, site reconnaissance, and additional exploration and laboratory testing.

Our conclusions, recommendations, and opinions are based on an analysis of the observed site conditions. If geotechnical conditions different from those described in this report are encountered, our office should be notified and additional recommendations, if warranted, will be provided upon request. It should be understood that the conditions of a site could change with time as a result of natural processes or the activities of man at the subject site or nearby sites.

In addition, changes to the applicable laws, regulations, codes, and standards of practice may occur due to government action or the broadening of knowledge. The findings of this report may, therefore, be invalidated over time, in part or in whole, by changes over which Ninyo & Moore has no control.

This report is intended exclusively for use by the client. Any use or reuse of the findings, conclusions, and/or recommendations of this report by parties other than the client is undertaken at said parties' sole risk.

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List of Aerial Photographs Reviewed				
Date	**ID**	**Line**	**Frame**	**Scale**
1-6-2006	KAV9282	4	7, 8	1:3600
10-22-2005	KAV9200	47	9, 10	1:7200
6-26-2000	AV6600	15	8, 9	1:12000
9-3-1997	AV5434	15	9, 10	1:12000
9-1-1993	AV4515	15	9, 10	1:12000
10-15-1985	AV2670	14	9, 10	1:12000
5-30-1979	AV1705	14	10, 11	1:12000
6-28-1977	AV1356	14	11, 12	1:12000
10-28-1969	AV933	15	9, 10	1:12000
5-8-1961	AV432	14	11, 12	1:12000
8-23-1960	AV385	3	16, 17	1:30000
6-18-1937	AV01	1	20, 21	1:12000

Source:
Quantum Spatial Inc., Novato, California

FIGURES



NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE. I REFERENCE: USGS, 2015.

N

FEET
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402965006_SL.dwg 10/10/2017 JP

FIGURE 1

Ninyo & Moore
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SITE LOCATION

JOHN GILL ELEMENTARY SCHOOL
555 AVENUE DEL ORA
REDWOOD CITY, CALIFORNIA
402965006 I 12/17



LEGEND

SITE BOUNDARY

A A' CROSS SECTION

REMI SURVEY

B-5 TD=7 BORING; TD=TOTAL DEPTH IN FEET

P-1 PERCOLATION TEST

N

FEET 0 100 200

NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE. I REFERENCE: GOOGLE EARTH, 2017.

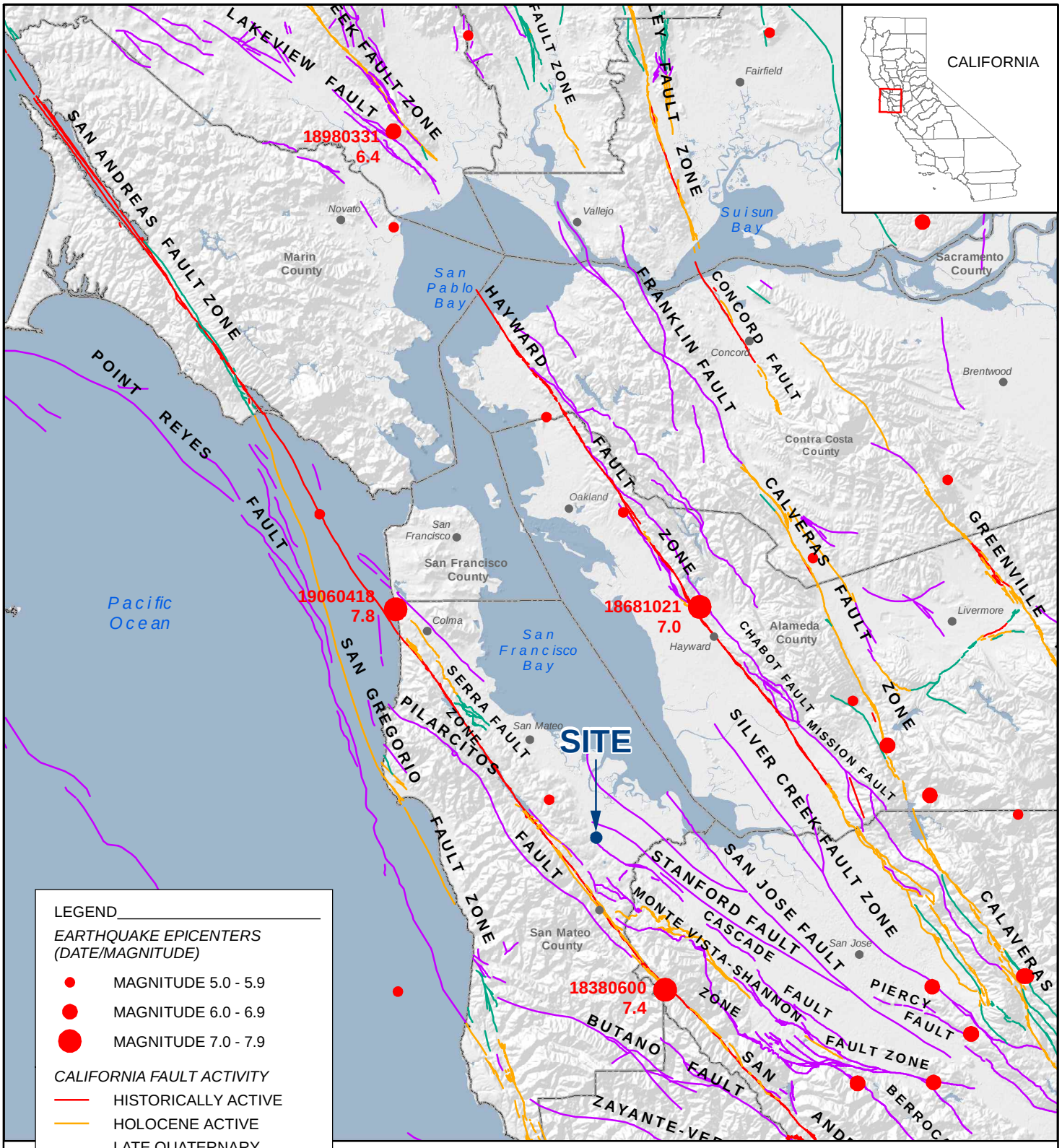
402965006_BL.dwg 11/14/2017 JP

FIGURE 2

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EXPLORATION LOCATIONS

JOHN GILL ELEMENTARY SCHOOL
555 AVENUE DEL ORA
REDWOOD CITY, CALIFORNIA
402965006 I 12/17



SOURCE: CALIFORNIA GEOLOGICAL SURVEY, 2000, MAP SHEET MS 49, RELEASED DECEMBER 14.

NOTE: DIRECTIONS, DIMENSIONS AND LOCATIONS ARE APPROXIMATE.

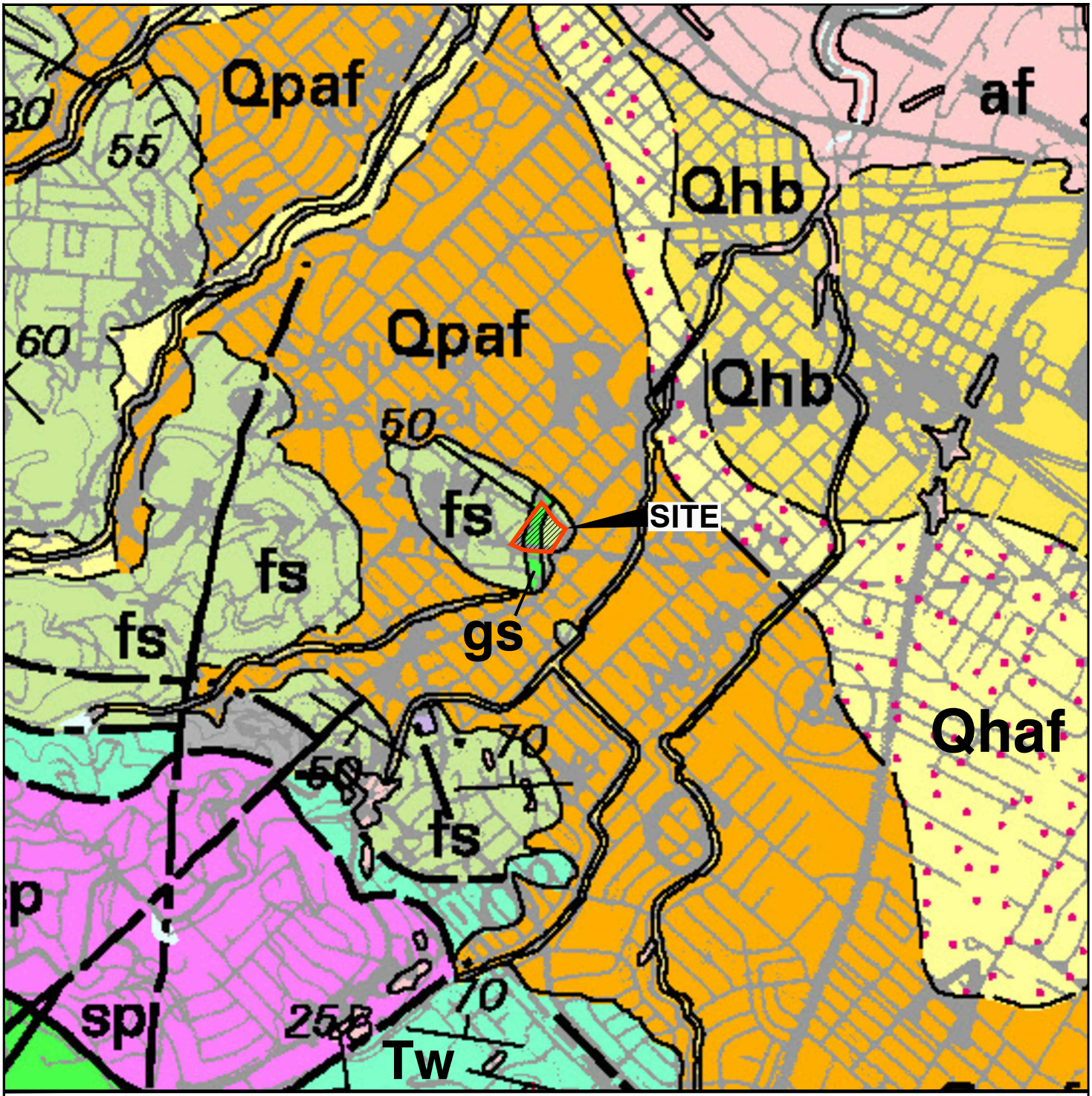
3_402965006_FL.mxd 10/10/2017 JDL, JP

FIGURE 3

FAULT LOCATIONS AND EARTHQUAKE EPICENTERS

JOHN GILL ELEMENTARY SCHOOL
555 AVENUE DEL ORA
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402965006 | 12/17

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LEGEND

- Qhaf / Qpaf — ALLUVIAL FAN AND FLUVIAL DEPOSITS (QUATERNARY)
- Tw — WHISKEY HILL FORMATION (EOCENE)
- fs — SANDSTONE (CRETACEOUS/JURASSIC)
- sp — SERPENTINITE (CRETACEOUS/JURASSIC)
- gs — GREENSTONE (CRETACEOUS/JURASSIC)
- GEOLOGIC CONTACT
- FAULT
- 30 — STRIKE AND DIP OF BEDDING

REFERENCE: BRABB, GRAYMER, AND JONES, 1998.
NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

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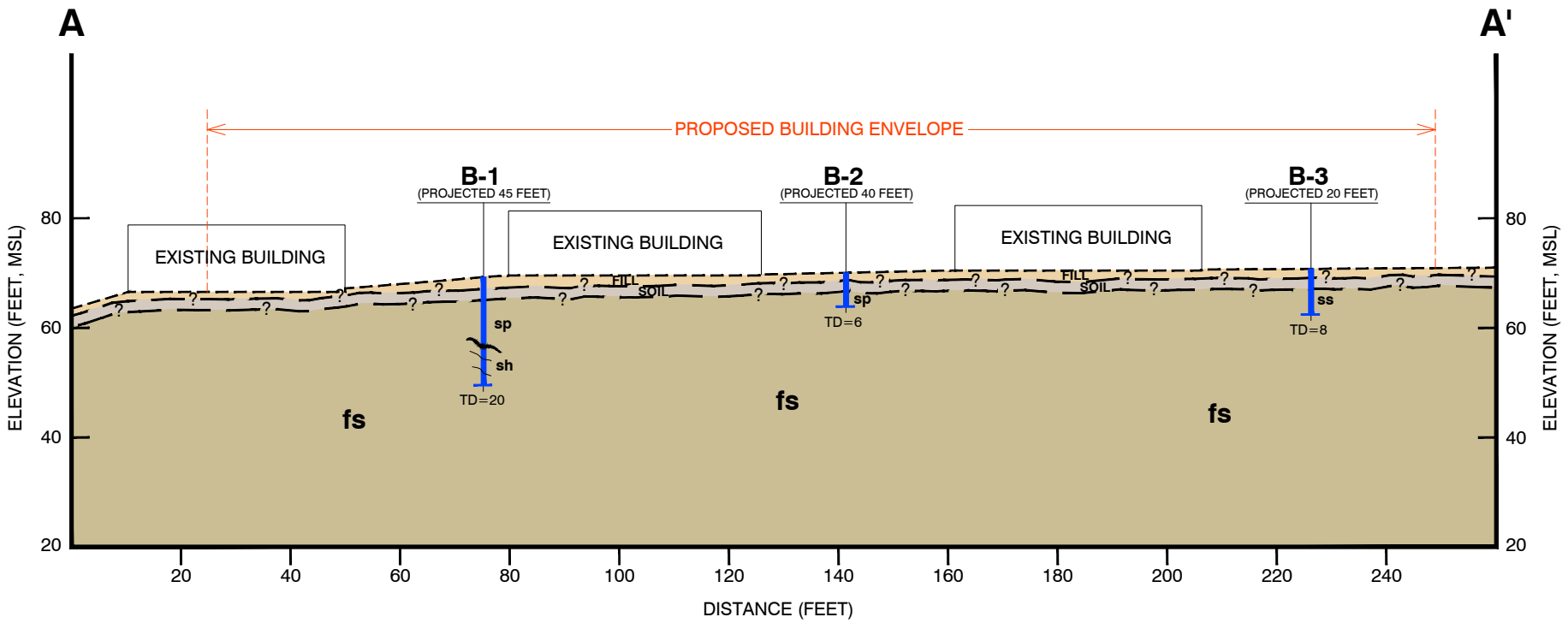
402965006_RG.dwg 12/08/2017 JP

FIGURE 4

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Geotechnical & Environmental Sciences Consultants

REGIONAL GEOLOGY

JOHN GILL ELEMENTARY SCHOOL
555 AVENUE DEL ORA
REDWOOD CITY, CALIFORNIA
402965006 I 12/17



LEGEND

FILL	ARTIFICIAL FILL (UNDOCUMENTED)
SOIL	RESIDUAL SOIL
fs	SANDSTONE (CRETACEOUS/JURRASIC)
sh -	SHALE
sp -	SERPENTINITE
ss -	SANDSTONE
MSL	MEAN SEA LEVEL
B-3 / TD=8	BORING; TD=TOTAL DEPTH IN FEET
?	GEOLOGIC CONTACT; QUERIED WHERE UNCERTAIN

NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

HORIZONTAL AND VERTICAL SCALE (FEET)

0 30 60

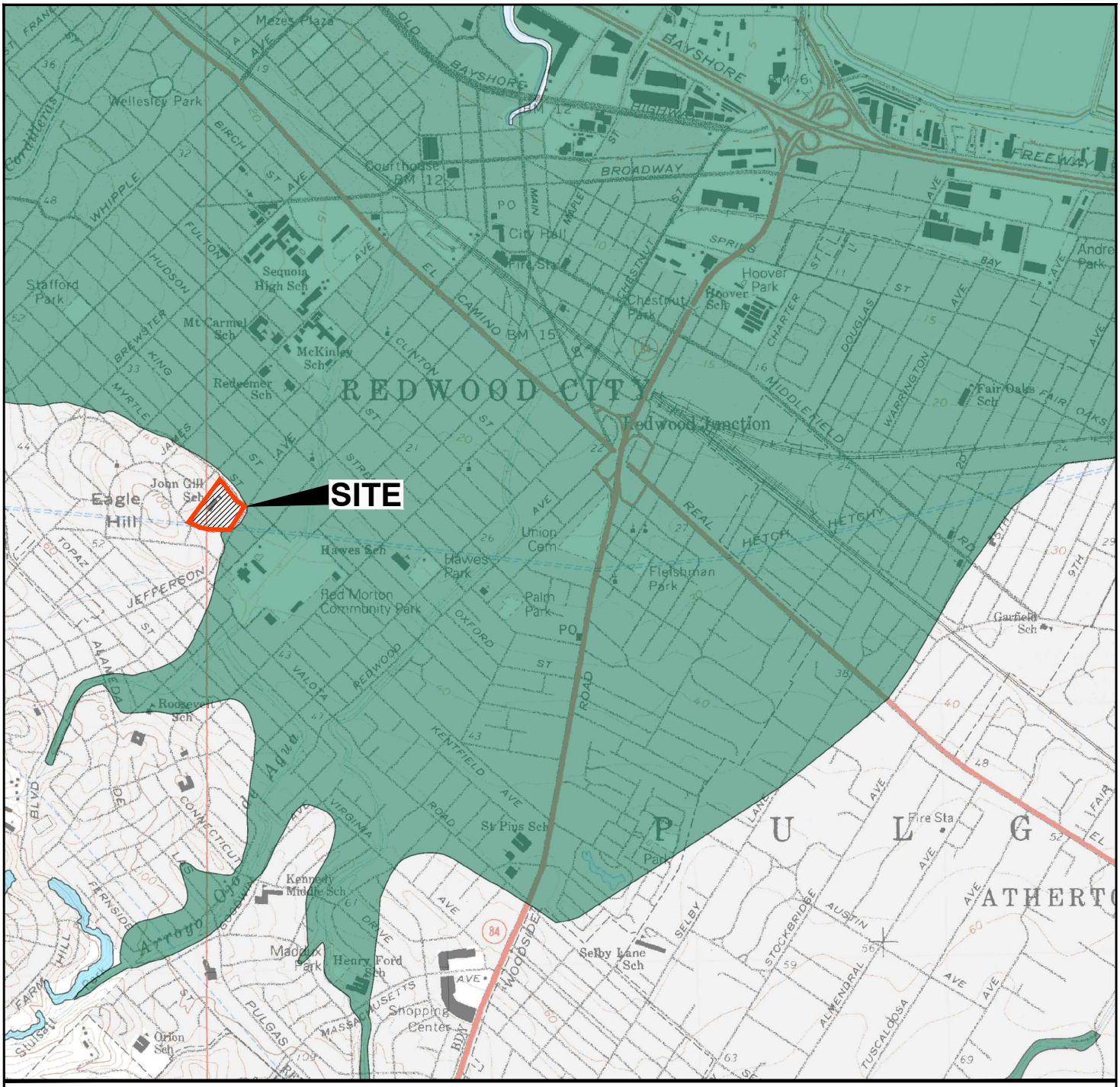
402965006_CSA.dwg 11/14/2017 JP

FIGURE 5

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CROSS SECTION A-A'

JOHN GILL ELEMENTARY SCHOOL
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REDWOOD CITY, CALIFORNIA
402965006 I 12/17



LEGEND

EARTHQUAKE-INDUCED LANDSLIDES

Areas where previous occurrence of landslide movement, or local topographic, geological, geotechnical and subsurface water conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required.

LIQUEFACTION:

Areas where historic occurrence of liquefaction, or local geological, geotechnical and groundwater conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required.

NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE. I REFERENCE: CGS, 2006.

N

FEET

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FIGURE 6

Ninyo & Moore

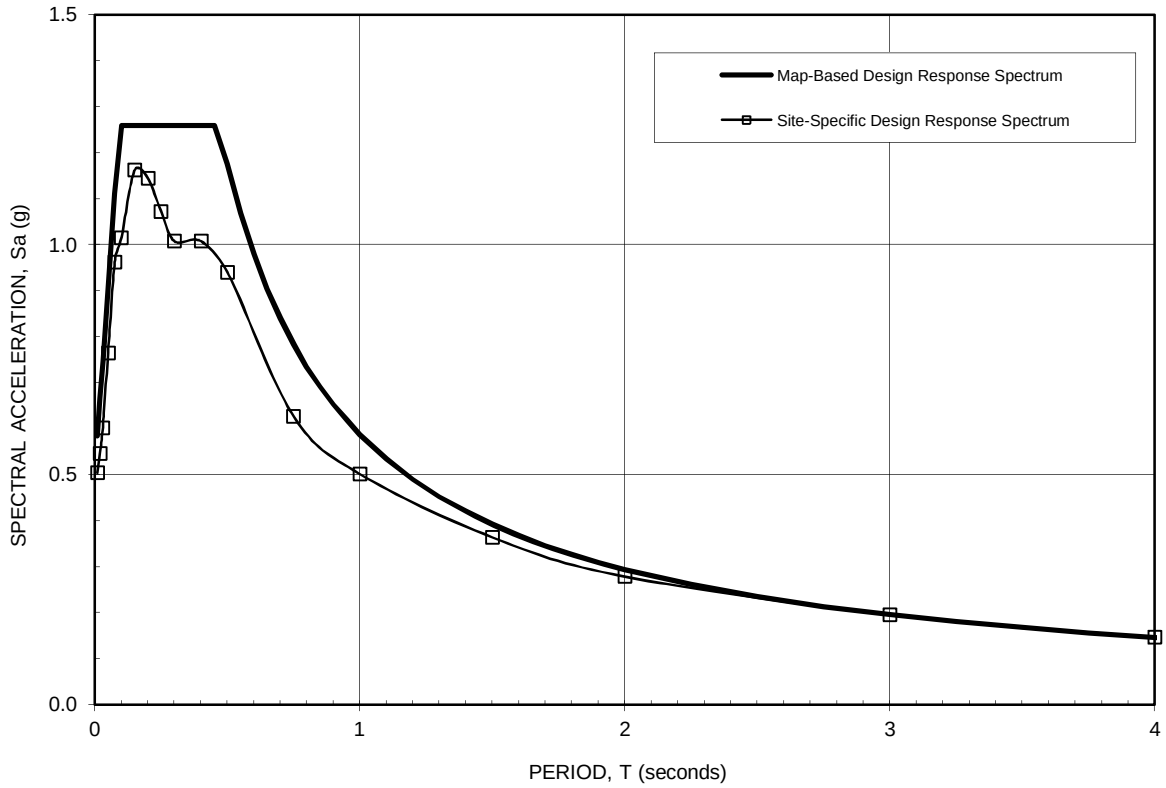
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SEISMIC HAZARD ZONES

JOHN GILL ELEMENTARY SCHOOL
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402965006 I 12/17

PERIOD (seconds)	MAP-BASED DESIGN RESPONSE SPECTRUM Sa, (g)	SITE-SPECIFIC DESIGN RESPONSE SPECTRUM Sa, (g)
0.010	0.585	0.504
0.050	0.909	0.765
0.100	1.260	1.016
0.150	1.260	1.162
0.200	1.260	1.145
0.250	1.260	1.073
0.300	1.260	1.008
0.400	1.260	1.008
0.500	1.176	0.941
0.750	0.784	0.627
1.000	0.588	0.502

S_{DS} = 1.145	S_{D1} = 0.558	S_{MS} = 1.718	S_{M1} = 0.8364	PGA_M = 0.688



NOTES:

1 Probabilistic Ground Motion is the Maximum Considered Earthquake (MCE_R) ground motion having 2% probability of exceedance In 50 years using Chiou & Youngs (2008), Campbell & Bozorgnia (2008), and Boore & Atkinson (2008) attenuation relationships.

2 Deterministic ARS is 84th percentile of the median values from attenuation relationships by Chiou & Youngs (2008), Campbell & Bozorgnia (2008), and Boore & Atkinson (2008) considering a Mw 8.0 event on the San Andreas fault located 5.5 kilometers from the site. It conforms with the lower bound limit per ASCE 7-10 Section 21.2.2 as modified by 2009 NEHRP Recommended Seismic Provisions.

3 Site-Specific MCE_R is the lesser of spectral ordinates of deterministic and probabilistic ARS at each period, adjusted for risk, per ASCE 7-10 Section 21.2.3. Site-Specific Design Response Spectrum conforms with lower bound limit per ASCE 7-10 Section 21.3.

4 Map-Based Design Response Spectrum is computed from mapped spectral ordinates modified for Site Class B (Rock) per ASCE 7-10 Section 11.4. It is presented for comparison.

FIGURE 7

ACCELERATION RESPONSE SPECTRA

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REDWOOD CITY, CALIFORNIA

Ninyo & Moore
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APPENDIX A

Boring Logs

APPENDIX A

BORING LOGS

Field Procedure for the Collection of Disturbed Samples

Disturbed soil samples were obtained in the field using the following methods.

Bulk Samples

Bulk samples of representative earth materials were obtained from the exploratory borings. The samples were bagged and transported to the laboratory for testing.

The Standard Penetration Test (SPT) Sampler

Disturbed drive samples of earth materials were obtained by means of a Standard Penetration Test sampler. The sampler is composed of a split barrel with an external diameter of 2 inches and an unlined internal diameter of 1-3/8 inches. The sampler was driven into the ground 12 to 18 inches with a 140-pound hammer free-falling from a height of 30 inches in general accordance with ASTM D 1586. The blow counts were recorded for every 6 inches of penetration; the blow counts reported on the logs are those for the last 12 inches of penetration. Soil samples were observed and removed from the sampler, bagged, sealed and transported to the laboratory for testing.

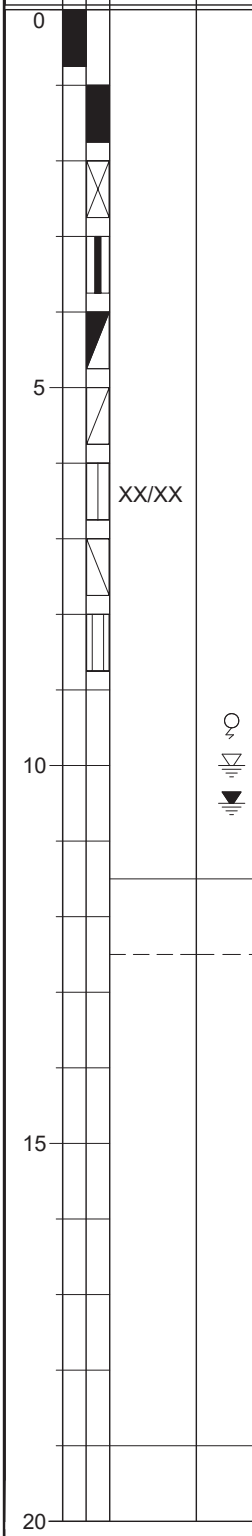
Field Procedure for the Collection of Relatively Undisturbed Samples

Relatively undisturbed soil samples were obtained in the field using the following methods.

The Modified Split-Barrel Drive Sampler

The sampler, with an external diameter of 3.0 inches, was lined with 6-inch long, thin brass liners with inside diameters of approximately 2.4 inches. The sample barrel was driven into the ground with the weight of a hammer in general accordance with ASTM D 3550. The driving weight was permitted to fall freely. The approximate length of the fall, the weight of the hammer, and the number of blows per foot of driving are presented on the boring log as an index to the relative resistance of the materials sampled. The samples were removed from the sample barrel in the brass liners, sealed, and transported to the laboratory for testing.

BORING LOG EXPLANATION SHEET



Bulk sample.

Modified split-barrel drive sampler.

No recovery with modified split-barrel drive sampler.

Sample retained by others.

Standard Penetration Test (SPT).

No recovery with a SPT.

Shelby tube sample. Distance pushed in inches/length of sample recovered in inches.

No recovery with Shelby tube sampler.

Continuous Push Sample.

Seepage.

Groundwater encountered during drilling.

Groundwater measured after drilling.

SM

MAJOR MATERIAL TYPE (SOIL):

Solid line denotes unit change.

CL

Dashed line denotes material change.

Attitudes: Strike/Dip
b: Bedding
c: Contact
j: Joint
f: Fracture
F: Fault
cs: Clay Seam
s: Shear
bss: Basal Slide Surface
sf: Shear Fracture
sz: Shear Zone
sbs: Shear Bedding Surface

The total depth line is a solid line that is drawn at the bottom of the boring.

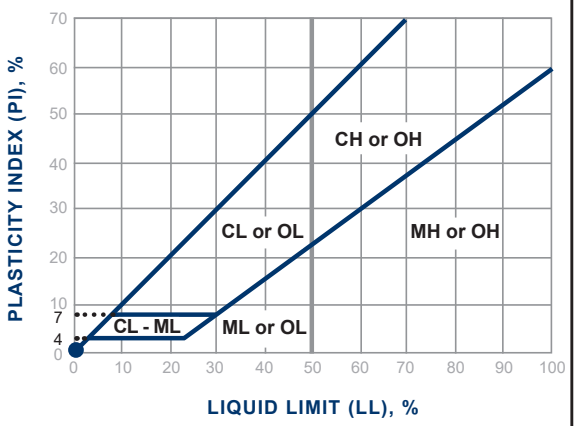
Soil Classification Chart Per ASTM D 2488

Primary Divisions			Secondary Divisions	
			Group Symbol	Group Name
COARSE-GRAINED SOILS more than 50% retained on No. 200 sieve	**GRAVEL** more than 50% of coarse fraction retained on No. 4 sieve	CLEAN GRAVEL less than 5% fines	GW	well-graded GRAVEL
			GP	poorly graded GRAVEL
		GRAVEL with DUAL CLASSIFICATIONS 5% to 12% fines	GW-GM	well-graded GRAVEL with silt
			GP-GM	poorly graded GRAVEL with silt
			GW-GC	well-graded GRAVEL with clay
			GP-GC	poorly graded GRAVEL with
		GRAVEL with FINES more than 12% fines	GM	silty GRAVEL
			GC	clayey GRAVEL
			GC-GM	silty, clayey GRAVEL
	SAND 50% or more of coarse fraction passes No. 4 sieve	CLEAN SAND less than 5% fines	SW	well-graded SAND
			SP	poorly graded SAND
		SAND with DUAL CLASSIFICATIONS 5% to 12% fines	SW-SM	well-graded SAND with silt
			SP-SM	poorly graded SAND with silt
			SW-SC	well-graded SAND with clay
			SP-SC	poorly graded SAND with clay
		SAND with FINES more than 12% fines	SM	silty SAND
			SC	clayey SAND
			SC-SM	silty, clayey SAND
FINE-GRAINED SOILS 50% or more passes No. 200 sieve	**SILT and CLAY** liquid limit less than 50%	INORGANIC	CL	lean CLAY
			ML	SILT
			CL-ML	silty CLAY
		ORGANIC	OL (PI > 4)	organic CLAY
			OL (PI < 4)	organic SILT
	SILT and CLAY liquid limit 50% or more	INORGANIC	CH	fat CLAY
			MH	elastic SILT
		ORGANIC	OH (plots on or above "A"-line)	organic CLAY
			OH (plots below "A"-line)	organic SILT
	Highly Organic Soils		PT	Peat

Grain Size

Description		Sieve Size	Grain Size	Approximate Size
Boulders		> 12"	> 12"	Larger than basketball-sized
Cobbles		3 - 12"	3 - 12"	Fist-sized to basketball-sized
Gravel	Coarse	3/4 - 3"	3/4 - 3"	Thumb-sized to fist-sized
	Fine	#4 - 3/4"	0.19 - 0.75"	Pea-sized to thumb-sized
Sand	Coarse	#10 - #4	0.079 - 0.19"	Rock-salt-sized to pea-sized
	Medium	#40 - #10	0.017 - 0.079"	Sugar-sized to rock-salt-sized
	Fine	#200 - #40	0.0029 - 0.017"	Flour-sized to sugar-sized
Fines		Passing #200	< 0.0029"	Flour-sized and smaller

Plasticity Chart



Apparent Density - Coarse-Grained Soil

Apparent Density	Spooling Cable or Cathead		Automatic Trip Hammer	
	SPT (blows/foot)	Modified Split Barrel (blows/foot)	SPT (blows/foot)	Modified Split Barrel (blows/foot)
Very Loose	≤ 4	≤ 8	≤ 3	≤ 5
Loose	5 - 10	9 - 21	4 - 7	6 - 14
Medium Dense	11 - 30	22 - 63	8 - 20	15 - 42
Dense	31 - 50	64 - 105	21 - 33	43 - 70
Very Dense	> 50	> 105	> 33	> 70

Consistency - Fine-Grained Soil

Consis-tency	Spooling Cable or Cathead		Automatic Trip Hammer	
	SPT (blows/foot)	Modified Split Barrel (blows/foot)	SPT (blows/foot)	Modified Split Barrel (blows/foot)
Very Soft	< 2	< 3	< 1	< 2
Soft	2 - 4	3 - 5	1 - 3	2 - 3
Firm	5 - 8	6 - 10	4 - 5	4 - 6
Stiff	9 - 15	11 - 20	6 - 10	7 - 13
Very Stiff	16 - 30	21 - 39	11 - 20	14 - 26
Hard	> 30	> 39	> 20	> 26

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USCS METHOD OF SOIL CLASSIFICATION

DATE DRILLED 10/03/2017 BORING NO. B-1

GROUND ELEVATION 71' ± (MSL) SHEET 1 OF 2

METHOD OF DRILLING 4" SSA, B-24 Truck Mounted (California Geo), 3" HA top 5'

DRIVE WEIGHT 140 LBS (cathead) DROP 30 INCHES

SAMPLED BY KCC LOGGED BY KCC REVIEWED BY DCS

DEPTH (feet)	SAMPLES (Bulk / Driven)	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0							ASPHALT CONCRETE: Approximately 4 inches thick.
						CH	AGGREGATE BASE: Approximately 3.5 inches thick.
							FILL: Gray, moist, stiff, sandy fat CLAY; trace gravel.
			14.7			CH	SOIL: Gray, moist, stiff, sandy fat CLAY; trace gravel.
5							
		54	11.5	118.7			BEDROCK: Olive, moist, weathered SERPENTINITE; soft rock. Light gray.
		55	9.8	118.8			Olive.
10							
		59	6.7	122.7			Dark gray to black, moist, weathered SHALE; seams of serpentinite, soft rock.
15							
		78/10"					
		27					
20							

FIGURE A- 1

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JOHN GILL ELEMENTARY SCHOOL
555 AVENUE DEL ORA, REDWOOD CITY, CALIFORNIA

DEPTH (feet)	SAMPLES Bulk	SAMPLES Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
20								Total Depth = 20 feet. Backfilled with cement grout and top off with cold asphalt shortly after drilling. Notes: Groundwater, though not encountered during drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report. The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not accurate for preparing construction bids and design documents.
25								
30								
35								
40								

DATE DRILLED 10/03/2017 BORING NO. B-1

GROUND ELEVATION 71' ± (MSL) SHEET 2 OF 2

METHOD OF DRILLING 4" SSA, B-24 Truck Mounted (California Geo), 3" HA top 5'

DRIVE WEIGHT 140 LBS (cathead) DROP 30 INCHES

SAMPLED BY KCC LOGGED BY KCC REVIEWED BY DCS

FIGURE A- 2

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DATE DRILLED 10/03/2017 BORING NO. B-2

GROUND ELEVATION 72' ± (MSL) SHEET 1 OF 1

METHOD OF DRILLING 4" SSA, B-24 Truck Mounted (California Geo), 3" HA top 5'

DRIVE WEIGHT 140 LBS (cathead) DROP 30 INCHES

SAMPLED BY KCC LOGGED BY KCC REVIEWED BY DCS

DEPTH (feet)	SAMPLES Bulk	SAMPLES Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0								ASPHALT CONCRETE: Approximately 4 inches thick.
							CH	AGGREGATE BASE: Approximately 3 inches thick.
								FILL: Gray, moist, stiff, sandy fat CLAY; trace gravel.
							CH	SOIL: Light gray, moist, stiff, sandy fat CLAY. Cobble.
5			50/5"					BEDROCK: Olive, moist, weathered SERPENTINITE; soft rock.
			50/4"					
10								Total Depth = Drill refusal at 6 feet. Backfilled with cement grout and top off with cold asphalt shortly after drilling. Notes: Groundwater, though not encountered during drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report. The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not accurate for preparing construction bids and design documents.
15								
20								

FIGURE A- 3

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JOHN GILL ELEMENTARY SCHOOL
555 AVENUE DEL ORA, REDWOOD CITY, CALIFORNIA

DATE DRILLED 10/03/2017 BORING NO. B-3

GROUND ELEVATION 73' ± (MSL) SHEET 1 OF 1

METHOD OF DRILLING 4" SSA, B-24 Truck Mounted (California Geo), 3" HA top 5'

DRIVE WEIGHT 140 LBS (cathead) DROP 30 INCHES

SAMPLED BY KCC LOGGED BY KCC REVIEWED BY DCS

DEPTH (feet)	SAMPLES (Bulk / Driven)	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0							ASPHALT CONCRETE: Approximately 3.5 inches thick.
						CL	AGGREGATE BASE: Approximately 5 inches thick.
							FILL:
			8.9			CL	Brown, moist, stiff, sandy lean CLAY; trace gravel.
							SOIL: Brown, moist, stiff, sandy lean CLAY; trace gravel.
5		50/5" 93/9"					BEDROCK: Yellowish brown, moist, weathered SANDSTONE; soft rock, fractures coated with iron oxide, fine to medium grained.
		50/0"					(Drill and standard penetration test refusal)
10							Total Depth = Drill refusal at 8 feet.
							Backfilled with cement grout and top off with cold asphalt shortly after drilling.
							Notes:
							Groundwater, though not encountered during drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.
							The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not accurate for preparing construction bids and design documents.
15							
20							

DATE DRILLED 10/03/2017 BORING NO. B-4

GROUND ELEVATION 68' ± (MSL) SHEET 1 OF 1

METHOD OF DRILLING 4" SSA, B-24 Truck Mounted (California Geo), 3" HA top 5'

DRIVE WEIGHT 140 LBS (cathead) DROP 30 INCHES

SAMPLED BY KCC LOGGED BY KCC REVIEWED BY DCS

DEPTH (feet)	SAMPLES (Bulk / Driven)	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0							ASPHALT CONCRETE: Approximately 4 inches thick.
						SC	AGGREGATE BASE: Approximately 5 inches thick.
							FILL:
						SC	Brown, moist, medium dense, clayey SAND; trace gravel.
							SOIL: Brown, moist, medium dense, clayey SAND; trace gravel.
5						CL	Olive brown, moist, stiff, sandy lean CLAY; trace gravel.
		30	14.4	116.5			BEDROCK: Grayish brown and olive, moist, weathered SERPENTINITE; soft rock, mottled with heavy iron oxide staining.
							Olive.
		89/11"	22.4	92			
10							
		50/3"					Gray.
		50/3"					
15							Total Depth = Drill refusal at 14.5 feet.
							Backfilled with cement grout and top off with cold asphalt shortly after drilling.
							Notes:
							Groundwater, though not encountered during drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.
							The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not accurate for preparing construction bids and design documents.
20							

DATE DRILLED 10/03/2017 BORING NO. B-5

GROUND ELEVATION 58' ± (MSL) SHEET 1 OF 1

METHOD OF DRILLING 4" SSA, B-24 Truck Mounted (California Geo), 3" HA top 5'

DRIVE WEIGHT 140 LBS (cathead) DROP 30 INCHES

SAMPLED BY KCC LOGGED BY KCC REVIEWED BY DCS

DEPTH (feet)	SAMPLES (Bulk / Driven)	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0						CL	TOP SOIL (AGGREGATE BASE): Approximately 3 inches thick. FILL: Gray, moist, stiff, sandy lean CLAY.
						CL	SOIL: Gray, moist, stiff, sandy lean CLAY. Very stiff.
5		50/4" 50/4"					BEDROCK: Light gray, moist, moderately hard, weathered SHALE/SERPENTINITE; soft rock.
10							Total Depth = Drill refusal at 7 feet. Backfilled with cement grout shortly after drilling. Notes: Groundwater, though not encountered during drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report. The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not accurate for preparing construction bids and design documents.
15							
20							

APPENDIX B

Laboratory Testing

APPENDIX B

LABORATORY TESTING

Classification
Soils were visually and texturally classified in accordance with the Unified Soil Classification System (USCS) in general accordance with ASTM D 2488-00. Soil classifications are indicated on the logs of the exploratory borings in Appendix A.

Moisture Content
The moisture content of samples obtained from the exploratory borings was evaluated in accordance with ASTM D 2216. The test results are presented on the boring logs in Appendix A.

In Place Density Tests
The dry density of relatively undisturbed samples obtained from the exploratory borings was evaluated in general accordance with ASTM D 2937. The test results are presented on the logs of the exploratory borings in Appendix A.

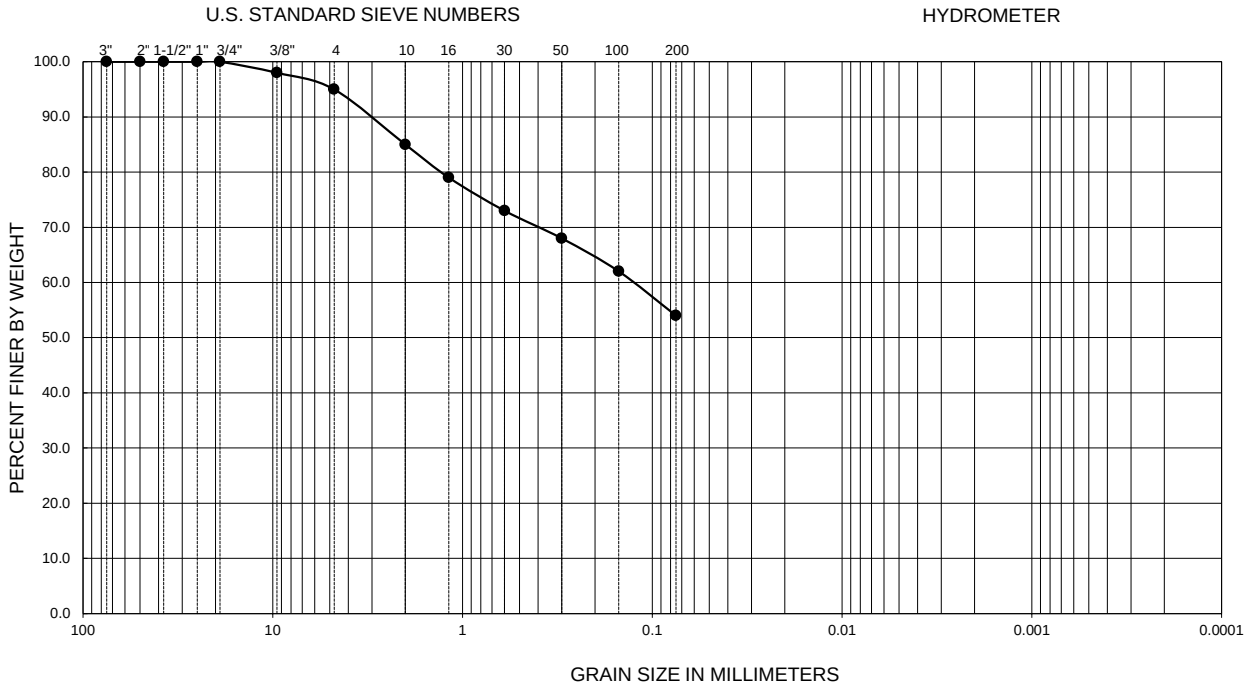
Gradation Analysis
A gradation analysis test was performed on selected representative soil samples in general accordance with ASTM D 422. The grain size distribution curve is shown on Figures B-1 and B-2. The test results were utilized in evaluating the soil classification in accordance with the Unified Soil Classification System (USCS).

Atterberg Limits
Tests were performed on selected representative fine-grained soil samples to evaluate the liquid limit, plastic limit, and plasticity index in general accordance with ASTM D 4318. These test results were utilized to evaluate the soil classification in accordance with the USCS. The test results and classifications are shown on Figure B-3.

Expansion Index Test
The expansion index of a selected material was evaluated in general accordance with ASTM D 4829. The specimen was molded under a specified compactive energy at approximately 50 percent saturation (plus or minus 1 percent). The prepared 1 inch thick by 4 inch diameter specimen was loaded with a surcharge of 144 pounds per square foot and inundated with tap water. Readings of volumetric swell were made for a period of 24 hours. The test results are presented on Figure B-4.

Soil Corrosivity Tests
Soil pH, and resistivity tests were performed on a representative sample in general accordance with California Test (CT) 643. The soluble sulfate and chloride contents of the selected sample were evaluated in general accordance with CT 417 and CT 422, respectively. The test results are presented on Figure B-5.

GRAVEL		SAND			FINES	
Coarse	Fine	Coarse	Medium	Fine	SILT	CLAY



Symbol	Sample Location	Depth (ft)	Liquid Limit	Plastic Limit	Plasticity Index	D_{10}	D_{30}	D_{60}	C_u	C_c	Passing No. 200 (percent)	USCS
●	B-2	0.0-5.0	50	13	37	--	--	0.14	--	--	54	CH

PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 422

FIGURE B-1

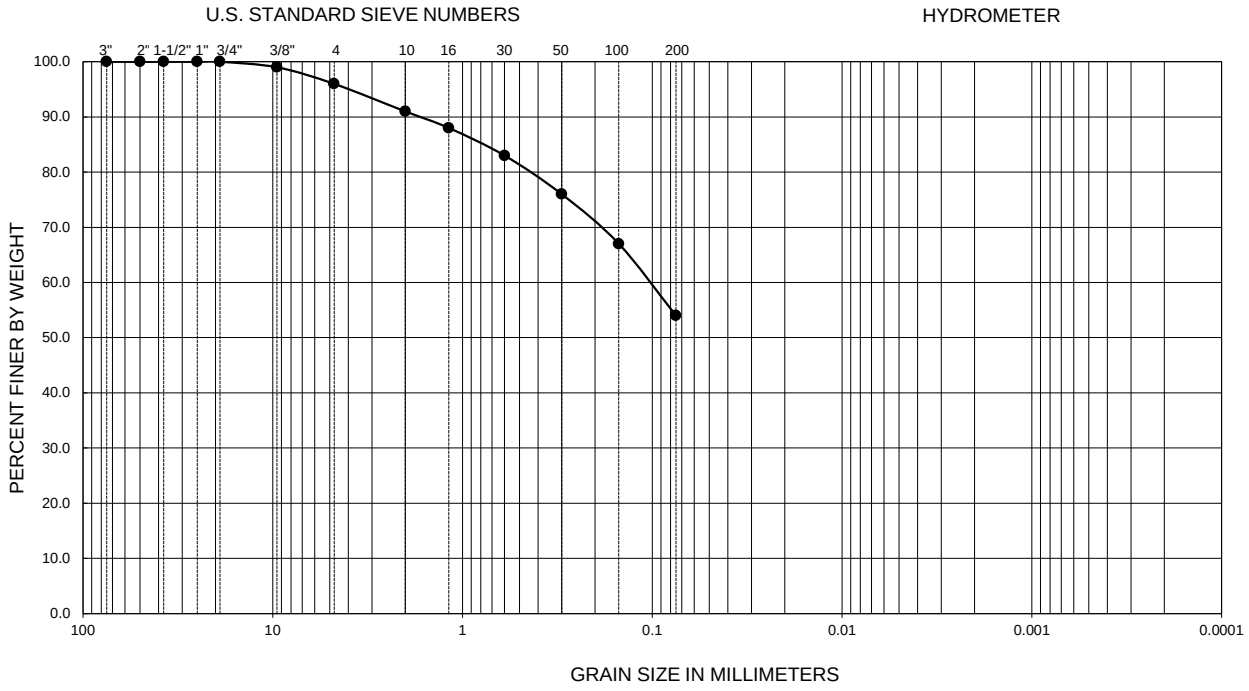
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GRADATION TEST RESULTS
JOHN GILL ELEMENTARY SCHOOL
555 AVENUE DEL ORA, REDWOOD CITY, CALIFORNIA

402965006 | 12/17

B-1 SIEVE (NEW) B-2 0-5'

GRAVEL		SAND			FINES	
Coarse	Fine	Coarse	Medium	Fine	SILT	CLAY



Symbol	Sample Location	Depth (ft)	Liquid Limit	Plastic Limit	Plasticity Index	D_{10}	D_{30}	D_{60}	C_u	C_c	Passing No. 200 (percent)	USCS
●	B-3	0.0-5.0	33	12	21	--	--	0.10	--	--	54	CL

PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 422

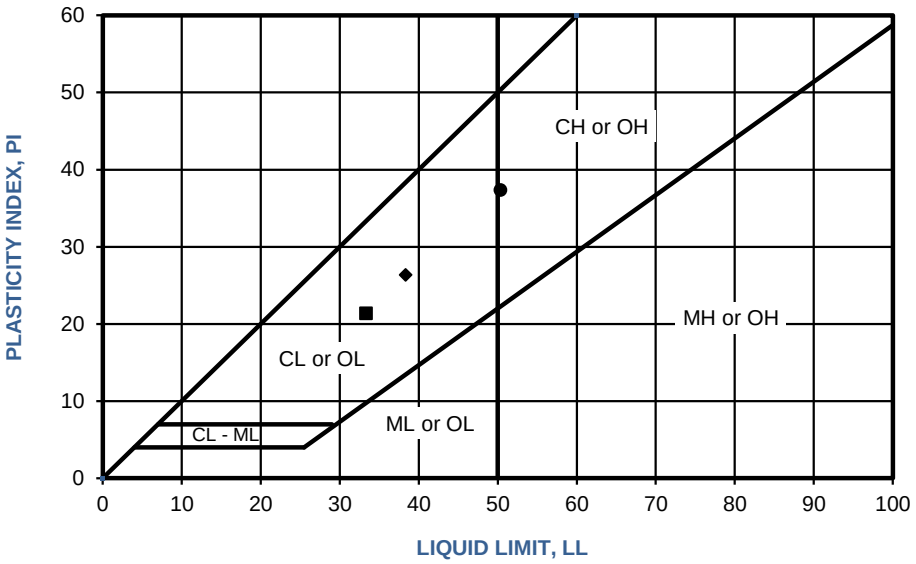
FIGURE B-2

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GRADATION TEST RESULTS
JOHN GILL ELEMENTARY SCHOOL
555 AVENUE DEL ORA. REDWOOD CITY, CALIFORNIA

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SYMBOL	LOCATION	DEPTH (ft)	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	USCS CLASSIFICATION (Fraction Finer Than No. 40 Sieve)	USCS
●	B-2	0.0-5.0	50	13	37	CH	CH
■	B-3	0.0-5.0	33	12	21	CL	CL
◆	B-5	0.0-5.0	38	12	26	CL	CL



PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 4318

FIGURE B-3

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ATTERBERG LIMITS TEST RESULTS
JOHN GILL ELEMENTARY SCHOOL
555 AVENUE DEL ORA, REDWOOD CITY, CALIFORNIA

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SAMPLE LOCATION	SAMPLE DEPTH (ft)	INITIAL MOISTURE (percent)	COMPACTED DRY DENSITY (pcf)	FINAL MOISTURE (percent)	VOLUMETRIC SWELL (in)	EXPANSION INDEX	POTENTIAL EXPANSION
B-1	0.0-5.0	12.7	100.9	27.6	0.120	120	High

PERFORMED IN GENERAL ACCORDANCE WITH ☐ UBC STANDARD 18-2 ☑ ASTM D 4829

FIGURE B-4

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EXPANSION INDEX TEST RESULTS
JOHN GILL ELEMENTARY SCHOOL
555 AVENUE DEL ORA, REDWOOD CITY, CALIFORNIA

402965006 | 12/17

SAMPLE LOCATION	SAMPLE DEPTH (ft)	pH [1]	RESISTIVITY [1] (ohm-cm)	SULFATE CONTENT [2]		CHLORIDE CONTENT [3] (ppm)
				(ppm)	(%)	
B-1	0.0-5.0	7.9	390	1240	0.124	300

[1] PERFORMED IN GENERAL ACCORDANCE WITH CALIFORNIA TEST METHOD 643
[2] PERFORMED IN GENERAL ACCORDANCE WITH CALIFORNIA TEST METHOD 417
[3] PERFORMED IN GENERAL ACCORDANCE WITH CALIFORNIA TEST METHOD 422

FIGURE B-5

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CORROSIVITY TEST RESULTS
JOHN GILL ELEMENTARY SCHOOL
555 AVENUE DEL ORA, REDWOOD CITY, CALIFORNIA

402965006 | 12/17

APPENDIX C

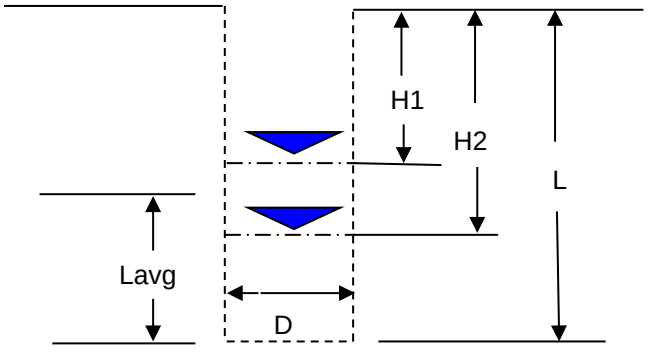
Percolation Test Results

Percolation Test Data Sheet (in Borings)

Project =	JOHN GILL ELEMENTARY SCHOOL
Project No. =	402965006

Depth of Test Hole, L (ft) =	2.0
Diameter, D (in) =	4.0
Initial Water Depth, d1 (in) =	18.0
Average/Final Water Level Drop, Δd (in) =	1.2
Reduction factor, Rf =	9.7

Test Hole No.	Time (hr:min)	Elapsed Time (min)	Water Level (in)	Change in Water Level (in)	Time Interval (hour)	Pre-Adjusted Percolation Rate (inch/hour)	Adjusted Percolation Rate (inch/hour)
B-2	8:56		6.00				
	9:11	15	7.75	1.75	0.25	7.0	7.21E-01
	9:12		6.00				
	9:29	17	7.75	1.75	0.28	6.2	6.36E-01
	9:30		6.00				
	9:48	18	7.75	1.75	0.30	5.8	6.01E-01
	9:49		5.50				
	10:04	15	7.00	1.50	0.25	6.0	6.18E-01
	10:05		6.00				
	10:20	15	7.50	1.50	0.25	6.0	6.18E-01
	10:22		6.00				
	10:38	16	7.25	1.25	0.27	4.7	4.83E-01
	10:40		6.00				
	10:56	16	7.25	1.25	0.27	4.7	4.83E-01
	10:57		6.00				
	11:12	15	7.25	1.25	0.25	5.0	5.15E-01
	11:13		6.00				
	11:30	17	7.16	1.16	0.28	4.1	4.22E-01
	11:31		6.00				
	11:48	17	7.16	1.16	0.28	4.1	4.22E-01
	11:49		6.00				
	12:06	17	7.16	1.16	0.28	4.1	4.22E-01
	12:06		6.00				
	12:25	19	7.25	1.25	0.32	3.9	4.07E-01



d1 = L - H1 (in inches)

APPENDIX D

Geophysical Seismic Survey Results

Seismic Survey

Seismic Site Classification

A seismic survey using passive surface wave techniques was performed at John Gill Elementary School site on 11 October 2017. The purpose of the study was to evaluate the subsurface shear-wave velocity at a representative location. The passive seismic method carried out included Micro-tremor Array Measurements (MAM) and consisted of a single linear profile of seismic data collection. The method provided a shear wave velocity model to a depth of approximately 100 feet below the ground surface (bgs) and V_s100 for seismic site classification (IBC, 2012). The following sections provide a summary of the methods and analyses used in our study. The seismic model results are provided in Figure D-1.

Field Methods

A Geode 24–Channel Seismograph (Geometrics Inc., San Jose, CA) was used for MAM surveying, with 4.5 Hertz (Hz) vertical component geophone placement every 10 feet for a total profile length of 230 feet. Approximately thirty records were collected, with a record length of 30 seconds (s) and 2 millisecond (ms) sample interval. The field data were digitally recorded in SEG2 format, reviewed in the field for data quality, saved to a hard disk, and documented.

Data Processing and Modeling

The MAM seismic data were processed using SeisImager (Geometrics Inc., San Jose, CA) seismic processing software. The dispersive characteristics of surface waves are used to evaluate the subsurface velocity at depth. Longer wavelength (that is, longer-period and lower-frequency) surface waves travel deeper and thus contain more information about deeper velocity structure. Shorter wavelength (that is, shorter-period and higher-frequency) surface waves travel shallower and thus contain more information about shallower velocity structure. The dispersion is dependent on the material properties, such as surface wave velocity, relative material densities, and Poisson's ratio. An inversion is performed on the collected passive seismic shear wave records within SeisImager to produce a model of the variation in shear wave velocities with depth. The following data processing flow was used to calculate Average Shear-wave Velocities (AVS) to a depth of approximately 100 feet (V_s100).

- Collated records into list file and edited any bad channels or records,
- Applied 2D Spatial Auto Correlation (SPAC); using a linear array and 24 geophones at 10 feet spacing,
- Phase velocity frequency transformation from 5 to 25 Hz

- Automated velocity picks of raw phase velocity were calculated and updated manually,
- Created an initial model and carried out a non-linear Least Squares Method (LSM) inversion to produce a final shear wave velocity model; convergence of the inversion was judged whether the model achieved an RMS <5% within 5 iterations,
- Calculated V_s100 using final shear wave velocity model.

Results

Shear wave data resolution generally decreases with depth, due to the loss of sensitivity of the dispersion curve to changes in shear wave velocity as depth increases. A figure showing our MAM seismic modeling results is provided in Figure D-1. The layered model in Figure D-1 indicates our interpretation of the approximate changes in shear wave velocity vertically with depth across the surveyed location.

The model results indicate a V_s100 value of **3176 feet/sec** and a Seismic Site Classification of **Class B** accordingly.

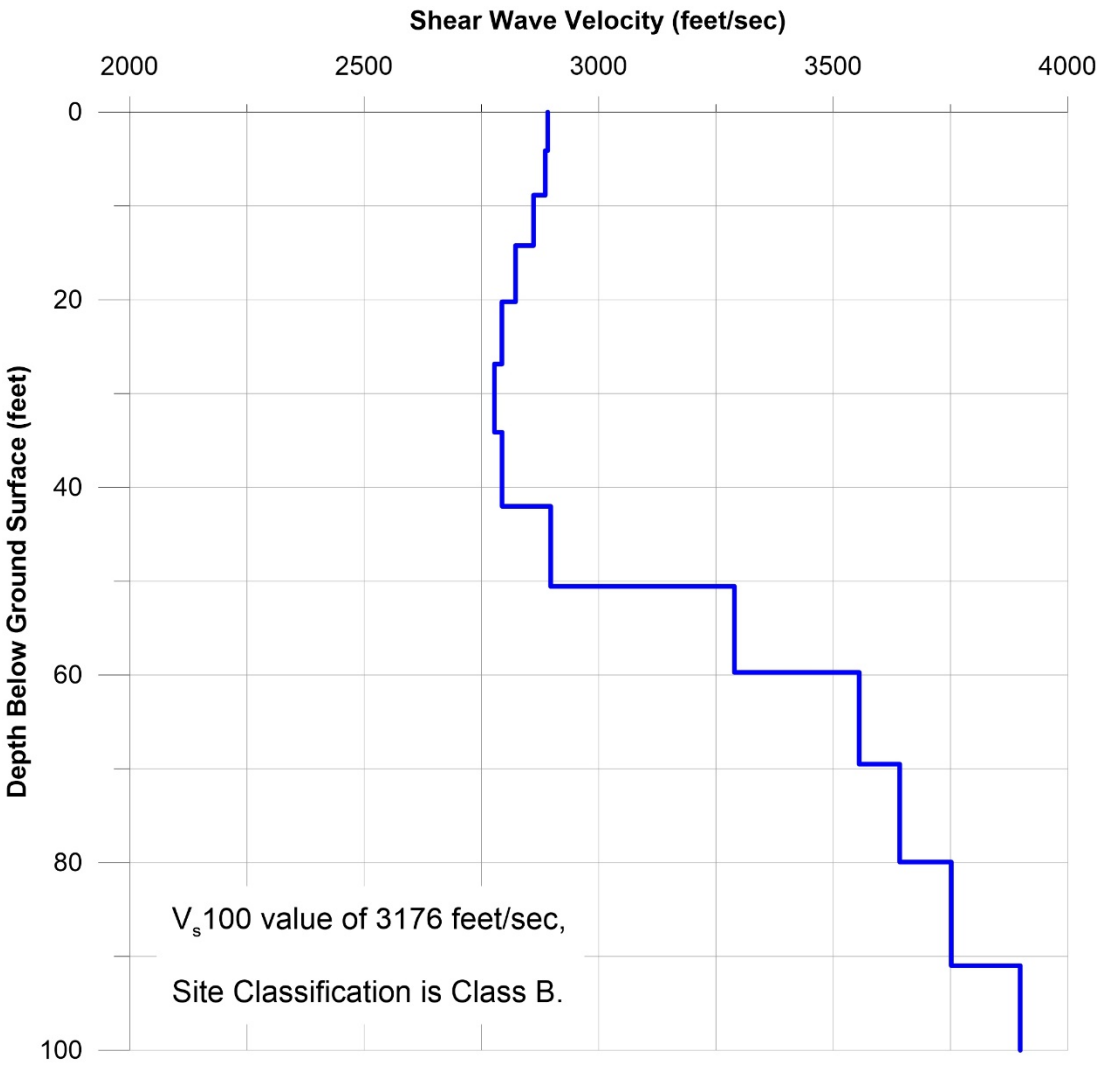


Figure D-1. MAM shear wave velocity model results for the John Gill Elementary School site.

APPENDIX E

Calculations

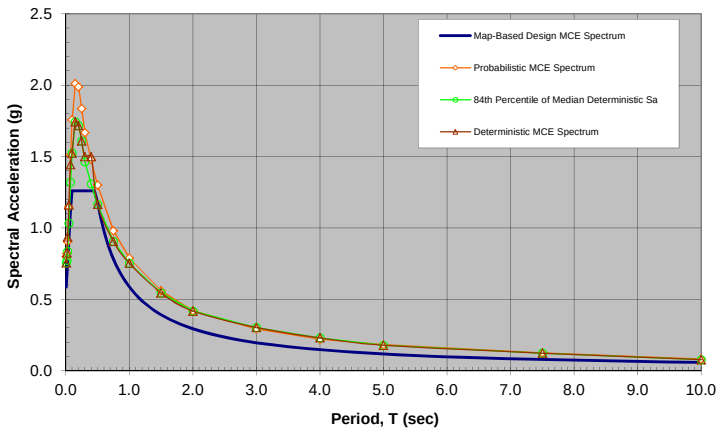
		Spectral Response Mapped Values		Site Coefficients		Spectral Response Adjusted for Site Effects		Design Spectral Response		Period at 0.2*Ts	Period at S_{D1}/S_{DS}	Long-Period Transition Period
Vs30	Site Class	Ss	S1	Fa	Fv	Sms	Sm1	Sds	Sd1	To	Ts	T_L
968	B	1.89	0.882	1.000	1.000	1.890	0.882	1.260	0.588	**0.093**	**0.467**	12.0
(m/sec)		1.5	0.600	1.000	1.000	1.500	0.600	1.000	0.400	0.080	0.400	12.0

Risk Coefficients		$\frac{(C_{RS}-C_{R1})}{0.8}$	PGA Site Coefficient	Mapped Adjusted PGA	ASCE 7-10 Sec. 21.5
C_{RS}	C_{R1}	Ratio	F_{PGA}	PGA_M	PGA
0.958	0.911	-0.05875	1.000	0.744	0.688

	Probabilistic MCE Spectrum 2% chance of exceedance in 50 years with 5% damping using OPENSHA					Probabilistic MCE_R Spectrum		DSHA Spectral Response 84th Percentile of Median Sa						Det. Limit on Response Spectrum	Deterministic MCE_R Spectrum	Site-Specific MCE_R
	Chiou & Youngs (2008) GMRotl50	Campbell & Bozorgnia (2008) GMRotl50	Boore & Atkinson (2008) GMRotl50	Max Horz Direction Response to Geomean	Average x Max Horz Direction to Geomean	Risk targeted for 1% chance of collapse in 50 years, using Method 1 (ASCE 7-10 Sec 21.2.1.1)		Chiou & Youngs (2008) GMRotl50	Campbell & Bozorgnia (2008) GMRotl50	Boore & Atkinson (2008) GMRotl50	Max Horz Direction Response to Geomean	Average x Max Horz Direction to Geomean	x(y84/y50) for 84th Percentile Sa	Fig. 21.2-1 ASCE 7-10 Sec. 21.2.2	Maximum between 84th percentile Sa and Det. Limit	
Period	CY_Sa	CB_Sa	BA_Sa	Max/Mean	PMH_Sa	Period	PMCER_Sa	CY_Sa	CB_Sa	BA_Sa	Max/Mean	DMH_Sa	DMH84_Sa	DL_Sa	DMCER_Sa	SaM
0.01	0.819	0.735	0.727	1.10	0.836	0.01	0.801	0.422	0.359	0.352	1.10	0.416	0.756	0.713	0.756	0.756
0.02	0.834	0.756	0.745	1.10	0.856	0.02	0.820	0.430	0.369	0.361	1.10	0.425	0.773	0.825	0.825	0.820
0.03	0.918	0.853	0.803	1.10	0.944	0.03	0.904	0.464	0.407	0.384	1.10	0.460	0.837	0.938	0.938	0.904
0.05	1.195	1.124	0.948	1.10	1.198	0.05	1.147	0.583	0.518	0.447	1.10	0.567	1.033	1.163	1.163	1.147
0.075	1.576	1.458	1.265	1.10	1.576	0.075	1.510	0.755	0.646	0.578	1.10	0.725	1.320	1.444	1.444	1.444
0.1	1.864	1.702	1.439	1.10	1.835	0.1	1.758	0.888	0.741	0.654	1.10	0.837	1.524	1.500	1.524	1.524
0.15	2.143	1.864	1.715	1.10	2.098	0.15	2.010	1.016	0.807	0.790	1.10	0.958	1.744	1.500	1.744	1.744
0.2	2.129	1.820	1.715	1.10	2.077	0.2	1.989	1.010	0.805	0.759	1.10	0.944	1.718	1.500	1.718	1.718
0.25	2.029	1.597	1.618	1.10	1.923	0.25	1.836	0.960	0.709	0.738	1.10	0.883	1.609	1.500	1.609	1.609
0.3	1.878	1.405	1.491	1.10	1.751	0.3	1.667	0.893	0.629	0.664	1.10	0.801	1.464	1.500	1.500	1.500
0.4	1.588	1.213	1.276	1.15	1.563	0.4	1.479	0.751	0.547	0.564	1.15	0.714	1.308	1.500	1.500	1.479
0.5	1.337	1.097	1.023	1.20	1.383	0.5	1.300	0.631	0.507	0.444	1.20	0.633	1.165	0.960	1.165	1.165
0.75	0.952	0.822	0.767	1.25	1.059	0.75	0.980	0.442	0.389	0.335	1.25	0.486	0.906	0.427	0.906	0.906
1	0.738	0.673	0.586	1.30	0.866	1	0.788	0.337	0.327	0.256	1.30	0.398	0.753	0.240	0.753	0.753
1.5	0.483	0.479	0.456	1.30	0.615	1.5	0.560	0.218	0.239	0.200	1.30	0.284	0.546	0.107	0.546	0.546
2	0.336	0.374	0.356	1.30	0.462	2	0.421	0.149	0.190	0.156	1.30	0.214	0.418	0.060	0.418	0.418
3	0.199	0.248	0.269	1.35	0.322	3	0.294	0.086	0.127	0.130	1.35	0.154	0.303	0.027	0.303	0.294
4	0.135	0.188	0.196	1.40	0.242	4	0.221	0.057	0.097	0.095	1.40	0.116	0.231	0.015	0.231	0.221
5	0.100	0.167	0.163	1.40	0.200	5	0.182	0.041	0.081	0.071	1.40	0.090	0.179	0.010	0.179	0.179
7.5	0.053	0.122	0.121	1.40	0.138	7.5	0.126	0.022	0.059	0.053	1.40	0.062	0.123	0.004	0.123	0.123
10	0.032	0.101	0.058	1.40	0.090	10	0.082	0.013	0.047	0.025	1.40	0.039	0.078	0.002	0.078	0.078

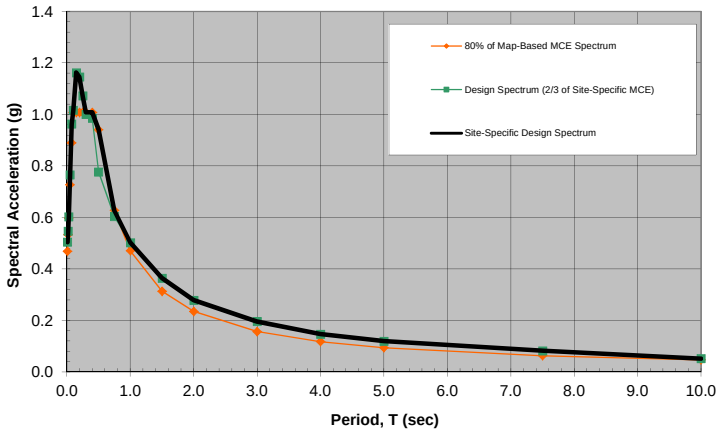
Site-Specific Spectral Response Acceleration Parameters				
	S_{DS}	1.145	S_{MS}	1.718
	S_{D1}	0.558	S_{M1}	0.836

Summary of Response Spectra



Map-Based Design MCE Spectrum		80% Map-Based Design Spectrum	2/3*Site-Specific MCE_R Spectrum	Site-Specific Design Spectrum
Period	Sa	Sa	Sa	Sa
0.01	0.585	0.468	0.504	0.504
0.02	0.666	0.533	0.547	0.547
0.03	0.747	0.598	0.603	0.603
0.05	0.909	0.727	0.765	0.765
0.075	1.112	0.889	0.963	0.963
0.1	1.260	1.008	1.016	1.016
0.15	1.260	1.008	1.162	1.162
0.2	1.260	1.008	1.145	1.145
0.25	1.260	1.008	1.073	1.073
0.3	1.260	1.008	1.000	1.008
0.4	1.260	1.008	0.986	1.008
0.5	1.176	0.941	0.777	0.941
0.75	0.784	0.627	0.604	0.627
1	0.588	0.470	0.502	0.502
1.5	0.392	0.314	0.364	0.364
2	0.294	0.235	0.279	0.279
3	0.196	0.157	0.196	0.196
4	0.147	0.118	0.147	0.147
5	0.118	0.094	0.119	0.119
7.5	0.078	0.063	0.082	0.082
10	0.059	0.047	0.052	0.052

Site-Specific Design Response Spectrum



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Appendix G
CDE/CCR Title 5 Geologic Safety Hazards Evaluation

CDE/CCR Title 5
Geologic and Safety Hazards Evaluation

John Gill School

555 Avenue Del Ora
Redwood City, San Mateo County, CA

Prepared for:

Redwood City School District
Redwood City, California

August 8, 2017

Prepared by:

McCloskey Consultants, Inc.



CDE/CCR TITLE 5 GEOLOGIC AND SAFETY HAZARDS EVALUATION

John Gill School

555 Avenue Del Ora
Redwood City, San Mateo County, CA

August 8, 2017

Prepared for:

Redwood City School District

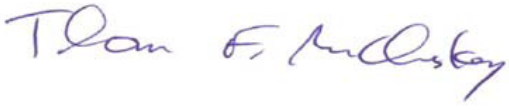
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Appendix A EDR Regulatory Agency Database Report

1.0 INTRODUCTION

Redwood City School District retained McCloskey Consultants, Inc. (MCI) to perform a CDE/CCR Title 5 Geologic and Environmental Safety Hazards Evaluation (geohazards evaluation) for the proposed demolition/relocation and replacement of some existing school facilities (Site) on a portion of the John Gill School located at 555 Avenue Del Ora in Redwood City, California. The purpose of this assessment was to identify geologic and other safety hazards associated with the property, in general accordance with California Education Code 17212.5 for geologic studies and California Department of Education (CDE)/California Code of Regulations (CCR), Title 5, Sections 14010, et. seq. for environmental studies.

The scope of investigative activities and initial findings are summarized in the following sections. This geohazards evaluation has been prepared by MCI for the sole use of the Redwood City School District (User).

2.0 SITE DESCRIPTION

2.1 Location

The school is located in Section 30, Township 5 South, Range 3 West, Mt. Diablo baseline and meridian, within the City of Redwood City, San Mateo County, California (Figures 1 and 2). The school is within the Palo Alto Quadrangle, California USGS 7½-minute series and San Francisco, California 15-minute series topographic maps; the latitude and longitude of the Site are identified as 37.4743900 north and 122.2405580 west.

The school property consists of one parcel with an APN identified by the San Mateo County Assessor's office as 058-161-390 and is 6.90 acres in size. The school has a street address of 555 Avenue Del Ora, and is bordered by Myrtle Avenue followed by residences to the north, Avenue Del Ora followed by residences to the south, residences to the west, and Jefferson Avenue followed by residences to the east. Also present just south of the Site is a Hetch-Hetchy pipeline easement operated by the San Francisco Public Utilities Commission (SFPUC).

2.2 General Characteristics

The Site portion to be redeveloped is developed with two permanent classroom buildings connected by a covered breezeway, a portable class and art room structure, an elevator building, and associated landscaping and asphalt and concrete-paved play, parking, and driveway areas and stairways. Topography of the site slopes moderately towards the east and northeast, with a generally uneven topography. Hazardous materials or wastes were not observed.

2.3 Topography

Based on review of the regulatory agency database report and the USGS 7.5-minute Palo Alto, California topographic map, the Site elevation averages approximately 60 feet above mean sea level. Topography on the Site is moderately sloping, with the vicinity having a gentler slope towards the northeast.

2.4 Historical Usage

Based on a review of historical aerial photographs, Sanborn maps, and topographic maps, as well as information provided by the property owner, the initial John Gill School buildings on the Site were the existing classroom structures constructed in 1947. Through the mid- to late-1960s the original classroom buildings and two very small structures along the Avenue Del Ora property frontage were the only structures on the Site, the remainder of which was undeveloped. The portable class and art room structure was constructed on the Site in 1968 and the elevator building was added in 2000.

3.0 GEOLOGIC EVALUATION

3.1 Regional Geology

Redwood City is located along the western margin of the San Francisco Bay, within the Coast Ranges geomorphic province. The Coast Ranges province is characterized by northwest-trending mountain ranges and valleys subparallel to the San Andreas Fault.

3.2 Site Geology and Soils

Soils in the vicinity of the Site are categorized by the USDA Soil Conservation Service as Orthents and Urban Land. Orthents soils are moderately-well and well-drained, variable soils with moderately coarse textures and moderate infiltration rates. Urban Land soils are partially hydric, clayey soils with a high water table or located shallow to an impervious layer, and having very slow infiltration rates.

3.3 Groundwater

The Site is located within the Santa Clara Valley Groundwater Basin, San Mateo Plain Subbasin. The aquifer system in the subbasin consists of the Santa Clara Formation and Quaternary-age alluvial deposits. The Santa Clara Formation is comprised of Plio-Pleistocene-age materials. The Quaternary alluvium is the most significant water-bearing formation in the Subbasin.

Based on vicinity hydrogeological information available on the Geotracker database, shallow groundwater likely is present at a depth of approximately 11 to 14 feet beneath ground surface. The groundwater flow direction is anticipated to follow the local topographic slope towards the northeast.

4.0 GEOLOGIC HAZARDS ANALYSIS

4.1 Fault Rupture Hazard Evaluation

The Alquist-Priolo Earthquake Fault Zoning Act was passed by the State of California in 1972, to mitigate earthquake hazards to human-occupied structures. Specifically, the Alquist-Priolo Act was designed to prevent construction of structures designed for human occupation on active faults capable of surface rupture. The California Geological Survey (CGS) has prepared a series of maps delineating established Earthquake Fault Zones under the Alquist-Priolo Act. Structures proposed for construction within an identified Earthquake Fault Zone require geologic investigation to confirm the structures will not be constructed across active faults. If an active fault is identified within a proposed project site, a setback is required. As not all faults have been identified, additional Earthquake Fault Zones may be added in the future.

Comparison of the Site location to the CGS maps indicates it is not located within an identified Earthquake Fault Zone. No known active faults traverse or trend towards the Site. The potential for damage to structures on the Site resulting from fault surface rupture appears low.

4.2 Ground Shaking

The Site is located in a seismically-active area, and the proposed structures on the Site likely will be subject to strong ground shaking. Redwood City is located in eastern portion of San Mateo County. The City of Redwood City General Plan (General Plan) documents the most prominent active fault as the San Andreas Fault System, approximately 3 miles southwest of the Site. The General Plan depicts an inferred potentially active fault trace, appearing to be one of the many faults included within the San Andreas Fault Zone, traversing on or adjoining northeast of the Site; this fault is not an active, Alquist-Priolo Special Study Zone (City of Redwood City, 2010). The probability of a magnitude 6.7 or greater earthquake in San Mateo County prior to the year 2032 has been estimated by the United States Geological Survey as 62 percent (City of Menlo Park, 2013). Geotechnical and structural engineering measures related to seismic shaking should be evaluated through appropriate design level studies.

4.3 Liquefaction

The sudden loss of shear strength in soil due to a rapid increase in pore water pressure, such as that caused by a seismic event, is known as liquefaction. When liquefaction occurs, soil

behaves more as a liquid than a solid, threatening the stability of structures constructed on the surface. Soil conditions resulting in a high likelihood of liquefaction are low-density granular soils (sands, silts, gravels and combinations of the three) with a high groundwater table.

Based on our review of the General Plan, areas of Redwood City with the highest risk of liquefaction are those in the lowland and tidal flat areas; the Site is not located within one of these areas. Additionally, the General Plan depicts the Site within an area designated as having a very low susceptibility to liquefaction. However, CGS mapping depicts the southern and western extent of a Liquefaction Zone (Seismic Hazard Zone) adjoining north and east of John Gill School, approximately 200 to 400 feet from the Site. Additionally, areas where the water table is shallower than 30 feet are considered most prone to liquefaction. The anticipated groundwater depth in the Site vicinity is approximately 11 to 14 feet beneath the ground surface. Geotechnical and structural engineering measures related to liquefaction should be evaluated through appropriate design level studies.

4.4 Seismically-Induced Settlement

Settlement of unsaturated granular soils through densification and particle rearrangement during a seismic event is known as seismically-induced settlement. Differing from liquefaction in that no buildup of excess pore water pressure occurs, similar impacts to structures may result from seismically-induced settlement.

Based on geologic and hydrogeologic characteristics in the area, there is a potential for settlement to occur within the Site area. Seismically-induced settlement should be evaluated through geotechnical investigation and analysis.

4.5 Expansive Soils

Surficial soils at the Site reportedly consist of Orthents soils and Urban Land (EDR, 2017), which are moderately-well- and well-drained moderately-coarse (Orthents) and clayey (Urban Land) soils. These soils can be expected to have a moderate shrink-swell potential. Based on soil type, the potential for expansive soils to be present appears moderate. The presence or absence of expansive soils should be evaluated through geotechnical investigation and analysis.

4.6 Subsidence

Areas underlain by aquifer systems at least partially comprised of fine-grained sediments that have been subject to extensive groundwater pumping may be subject to land subsidence. As the support of an aquifer system is comprised of the granular structure and fluid pressure of the groundwater filling the intragranular pore spaces, significant groundwater withdrawal leads to lower fluid pressure and a resulting increase in weight of the overlying soil on the granular

structure. Excessive pumping and associated pressure on the soil structure may result in compaction of the aquifer, known as land subsidence.

Groundwater is not a primary source of potable water for the City of Redwood City. The potential for subsidence to occur at the Site, attributable to excessive pumping, is low.

4.7 Landslides and Slope Stability

Topography at the Site is moderately sloping and in the vicinity topographic sloping is gentle; the Site is not situated in immediate proximity to any significant slopes. Additionally, the General Plan depicts the Site outside of earthquake-inducted landslide zones. Based on the topography and General Plan mapping, the potential for landslides or the failure of natural slopes to impact Site development is low.

4.8 Flood Hazard

Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map, Community Panel Number 06081C0301E, dated October 16, 2012, depicted the Site within Flood Zone X. FEMA defines Flood Zone X as areas determined to be outside of the 0.2% annual chance floodplain.

4.9 Dam Inundation

Catastrophic failure of dams resulting in inundation of down-stream areas is a rare occurrence, and most likely to occur following a significant seismic event. The State Office of Emergency Services (OES), utilizing information from the US Army Corps of Engineers, US Bureau of Reclamation, and Department of Water Resources, is the agency responsible for providing local governments with critical hazard response planning information, including that related to flooding from dam inundation. An additional dam failure inundation map was available in the General Plan.

Based on the General Plan and OES dam failure inundation maps, Bear Gulch, Lower Crystal Springs, Laurel Creek Poly, Notre Dame, and Emerald Lake reservoirs were determined to be located within a moderate proximity to the Site. Based on the OES dam inundation maps for the reservoirs, as well as the Dam Inundation Flood Hazards map included in the General Plan, the Site is depicted outside the inundated areas. However, the inundation zone for Emerald Lake is depicted adjoining north and east of John Gill School, approximately 200 to 400 feet from the Site.

4.10 Tsunami/Seiche

A long-period sea wave generated by an earthquake or submarine landslide is known as a tsunami. A similar wave occurring in a large body or water such as a lake or reservoir is known

as a seiche. Based on the distance from the nearest significant body of water, a tsunami or seiche would not impact the Site.

4.11 Volcanic Activity

Volcanic activity historically has occurred in California, as recently as the 1910s in northeastern California. Falling ash typically is the most significant hazard from a volcanic eruption. There are no major volcanic areas nearby with recognized potential to impact the Site.

4.12 Naturally-Occurring Asbestos

Asbestos, a naturally-occurring, fibrous silicate mineral, is a known carcinogen. Naturally-occurring asbestos (NOA) most frequently occurs in and immediately adjacent to areas of ultramafic (igneous and metamorphic rocks with high iron and magnesium concentrations) rock outcrops. The nearest outcrop of ultramafic rock that could contain NOA is documented approximately 2 miles to the west-southwest (Department of Conservation, 2000). This is within the 10-mile distance established by the DTSC Schools Program guidelines which triggers sampling for NOA fibers.

4.13 Radon

Radon, a colorless, odorless and tasteless gas, is a naturally-occurring byproduct of the decay of uranium. As a radioactive gas, studies have demonstrated a correlation between elevated radon concentrations and lung cancer. The correlation is most pronounced for humans inhabiting residential buildings with elevated radon concentrations over a period of years. The US Environmental Protection Agency (EPA) has designated each county in the United States one of three zones based on the potential for radon accumulation. The EPA action limit for asbestos is 4.0 pCi/L.

Based on information provided in the regulatory agency database report, two Federal and 119 State radon screening tests have been performed within the Site zip code. The Federal radon screening tests of the 1st floor living area reported average radon activity at 2.000 pCi/l, with both radon test results beneath the USEPA recommended action level of 4 pCi/l. No Federal radon screening tests of the basement level were reported. Twenty seven of the 119 State tests (23%) reported radon exceeding the 4 pCi/l action level. San Mateo County is reported in Federal EPA Radon Zone 2, which corresponds to an indoor average radon concentration greater than 2 pCi/L but less than 4 pCi/L. Based on the test data, there is a low probability of radon exceeding the action level.

5.0 ENVIRONMENTAL SAFETY HAZARDS EVALUATION

5.1 Potential Presence of Toxic and Hazardous Substances

5.1.1 Agricultural Use

Historical agricultural cultivation of the Site was not documented in the available historical sources.

5.1.2 Aged Structures

Several of the structures on the Site have been present since the 1940s and 1960s. Additionally, one or two small structures were documented along the Avenue Del Ora frontage of the Site during the 1940s with one possibly remaining until the 1970s. Based on the dates of construction, the paint on these structures may contain lead, and flaking lead-based paint (LBP) may have impacted exposed soil adjacent to the structures. Additionally, application of pesticides and/or herbicides may have occurred around the building perimeters. Evaluation of exposed near-surface soil around the structure perimeters for the presence of pesticides and related metals, as well as lead, exceeding DTSC school standards is recommended.

5.1.3 Oil and Gas Wells

Visual observation of the Site and vicinity was conducted, as was review of Department of Oil, Gas and Geothermal Resources (DOGGR) maps available on the DOGGR website. No gas wells or dry holes were reported on or within 1,500 feet of the Site.

5.1.4 Other Toxic and Hazardous Substances

5.1.4.1 On-Site

Significant quantities of hazardous materials are not stored or used at the Site. The Environmental Data Resources Inc. (EDR) Radius Map Report (Appendix A) includes a search of regulatory agency databases as specified in American Society of Testing and Materials (ASTM) E 1527-13. The Site is listed on the Haznet, RCRA Small Quantity Generator (SQG), FINDS, and ECHO databases reviewed by EDR in preparation of the Radius Map Report. Listing on the Haznet and SQG databases (based on information provided by RCSD) was for disposal of asbestos-containing waste and organic solids related to building renovation activities. Listings on the FINDS and ECHO databases were related to the SQG and Haznet listings. The ECHO and SQG database listings indicated no violations. The listings are not indicative of an environmental concern on the Site. Generation/disposal of non-renovation hazardous wastes was not documented at the Site.

Hazardous materials and/or underground storage tank (UST) files related to the Site's address were requested from the San Mateo County Environmental Health Department (SMCEHD). According to the SMCEHD, they have no hazardous materials or UST files for the Site. The Site is not listed on the State Water Resources Control Board (SWRCB) Geotracker database or on the California Department of Toxic Substances Control (DTSC) Envirostor database which means there have not been known or suspected uncontrolled releases of hazardous substances of concern to these agencies.

5.1.4.2 Off-Site

The only release hazardous materials release documented in the groundwater flow upgradient direction from the Site in the EDR report, Jefferson Chevron at 3139 Jefferson Avenue, is located more than 1/3 mile from the Site. Based on information available on the Geotracker database, Jefferson Chevron does not have significant contaminant concentrations migrating beyond the property perimeter and therefore is not an environmental concern for the Site.

Jefferson Chevron, as well as other regulatory agency-listed facilities within ¼ mile of the Site, were researched through the EDR radius map report, SWRCB Geotracker and DTSC Envirostor databases as well. Based on the available information, no vicinity properties within ¼ mile radius appear likely to be of significant impact to the Site through storage of significant quantities of hazardous materials or documented releases to soil and/or groundwater.

5.2 Solid Waste or Hazardous Waste Transportation, Storage, or Disposal Facilities

A review of the Solid Waste Facilities/Landfill Facilities (SWF/LF) and Federal Resource Conservation and Recovery Act (RCRA) Transportation, Storage, and Disposal Facilities (TSDF) databases included in the EDR report (Appendix A) did not reveal the presence of solid waste or hazardous waste transportation, storage, or disposal facilities within ½ mile of the Site.

5.3 High-Pressure Natural Gas or Fuel Transmission Pipelines

The National Pipeline Mapping Service (NPMS) Public Map Viewer application of the Department of Transportation (DOT) did not depict any natural gas transmission or hazardous liquid pipelines within ¼ mile of the Site. Mr. Eric Alvarado of Pacific Gas and Electric Company (PG&E), contacted via email on June 22, 2017, stated there are no natural gas pipelines with operating pressures exceeding 80 psig within 1,500 feet of the Site.

5.4 High-Volume Water and Wastewater Pipelines

The City of Redwood City Department of Public Works, Water Department (RCDPW) is the water purveyor for the Site, with potable water sourced through San Francisco Public Utilities

Commission (SFPUC) Hetch-Hetchy surface water sources. Mr. Jeff Chou with the RCDPW emailed a link to the RCDPW map depicting the location of water lines within 1,500 feet of the Site. Based on review of the pipeline map on June 26, 2017, RCDPW operates several 12-inch diameter water mains within 1,500 feet of the Site. These locations include within the western side of the right-of-way for Madison Avenue (12-inch diameter), approximately 595 feet southeast, within a right-of-way between the fields of Red Morton Park northeast of the Nevada Street termination (12-inch diameter), approximately 1,050 feet southeast, within the western side of the right-of-way for James Avenue (12-inch diameter), approximately 805 feet northwest, and within the southern side of the right-of-way for Myrtle Avenue northwest of James Avenue (12-inch diameter), approximately 910 feet northwest. The Madison Avenue pipeline was documented to be of PVC construction and installed in 2004, the Red Morton Park pipeline to be of PVC construction and installed in 1992, the James Avenue pipeline to be of cast iron construction and installed in 1952, and the Myrtle Street pipeline to be of PVC construction and installed in 2002. Based on location of these 12-inch diameter pipelines within a 1,500-foot radius of the Site, a pipeline risk analysis is required by the CDE.

Based on information available on the Redwood City Geographic Information System (GIS) on-line database and Google Earth aerial photographs, the SFPUC Hetch-Hetchy water pipeline easement is located beneath the Avenue Del Ora right-of-way and John Gill School parking lot adjoining south of the Site, possibly including beneath the southern-most corner of the Site itself. Based on information provided by Mr. Donald Dias of RCSD and Underground Service Alert markings along the easement, the Hetch-Hetchy easement is 60 feet wide and includes three 5-foot diameter water pipelines. Based on location of these pipelines within a 1,500-foot radius of the Site, a pipeline risk analysis is required by the CDE.

The RCDPW also provides sewer service for Menlo Park. According to Mr. Jeff Chou with the RCDPW, none of the RCDPW sewer pipelines are pressurized.

5.5 Electromagnetic Fields/Electrical Power Lines

The CDE, in consultation with the California Department of Health Services (DHS), has established required separation distances for proposed school facilities in proximity to easements for high-voltage power transmission lines. The required distances between the edge of the transmission line easements and any portion of a school property line are: 100 feet for a 50 to 133 kV line, 150 feet for a 220 to 230 kV line, and 350 feet for a 500 to 550 kV line.

Overhead power lines were observed adjoining the southern side of Avenue Del Oro at the time of the Site reconnaissance. Based on information provided by Mr. Mike Allen with Pacific Gas and Electric Company (PG&E), contacted on June 26, 2017, all power lines within 350 feet of the

Site, including those observed, are 4 kV distribution lines. There are no transmission lines within 1 mile of the Site. No setback is required for the 4 kV power lines.

5.6 Proximity to Facilities Generating Hazardous Air Emissions

The Site is not included on the Emissions Inventory Database of the Bay Area Air Quality Management District (BAAQMD), as identified through review of the regulatory agency database report. No documentation of air emissions from the Site was found through other available sources.

The California Air Resources Board (ARB) on-line Facility Search Engine database was utilized to identify facilities within an approximately ¼-mile radius of the Site having reported criteria pollutant emissions. Based on the reported information, one facility is listed within a ¼-mile radius of the Site, Red Morton Community Center at 1120 Roosevelt Avenue. The community center is located between approximately 630 and 1,520 feet southeast of the Site, depending upon where the emissions are generated. Reported emissions include 0.002 ton/year total organic hydrocarbon compounds, 0.002 ton/year reactive organic hydrocarbon compounds, 0.005 ton/year carbon monoxide, 0.023 ton/year NOx, and less than 0.001 ton/year SOx and particulate matter. The emissions documented for the Red Morton Community Center are not of concern to the Site.

The BAAQMD was contacted on June 19, 2017, to determine if any air emission permits were on file for properties within an approximate ¼-mile radius of the Site. The BAAQMD stated that 30 days was required to process the request, a period time in excess of the available time for this study.

5.7 Proximity to Railroads

Railroad tracks were not documented within 1,500 feet of the Site on the Google Earth 2017 aerial photograph or the 1997 topographic map.

5.8 Proximity to Airports

Review of the Google Earth 2017 aerial photograph of the Site vicinity and other sources did not identify any airports within 2 nautical miles of the Site. The southeastern end of the San Carlos Airport runway system is located approximately 2.07 nautical miles north-northwest of the Site.

5.9 Water/Fuel Storage Tanks

Large fuel or water aboveground storage tanks (ASTs) were not observed on the Site at the time of the reconnaissance.

No ASTs, water or fuel, were observed within a 1,500-foot radius of the Site, but may be present although not readily observed from public right-of-ways or on the Google Earth 2017 photograph or 1997 Palo Alto, California 7.5-minute topographic map.

5.10 Traffic Corridor

Review of the Google Earth 2017 aerial photograph map of the Site vicinity and the 1997 Palo Alto, California 7.5-minute topographic map, along with a reconnaissance of the Site vicinity, identified no busy traffic corridors within 500 feet of the Site.

6.0 FINDINGS AND RECOMMENDATIONS

Based on the results of the geologic and environmental safety hazards evaluation conducted in general accordance with California Education Code 17212.5 for geologic studies and California Department of Education (CDE)/California Code of Regulations (CCR), Title 5, Sections 14010, et. seq. for environmental studies, the following summary of findings and recommendations is presented.

6.1 Geologic Hazards

- The Site is not located within a mapped Earthquake Fault Hazard Zone, and therefore the potential for damage to structures on the Site from fault surface rupture is low. The Site is not currently located within an Alquist-Priolo Earthquake Fault Zone and no known active faults traverse the Site.

- The Site is located in a seismically active area, and structures on the Site are likely to be subject to moderate ground shaking. Geotechnical and structural engineering measures related to seismic shaking should be evaluated through appropriate design level studies.

- The Site is not located within a mapped Seismic Hazard Zone for Liquefaction, however based on the shallow water table, the Site is prone to liquefaction. Geotechnical and structural engineering measures related to liquefaction should be evaluated through appropriate design level studies.

- Based on geologic and hydrogeologic characteristics in the area, the Site area may be susceptible to seismically-induced settlement. The potential for settlement should be evaluated through geotechnical investigation and analysis.

- Based on soil type designated for the Site, there is a moderate potential for expansive soils to be present. The presence or absence of expansive soils should be evaluated through geotechnical investigation and analysis.

- Topography at the Site is moderately sloping, however the Site is not situated close to any significant slopes. Based on the topography, the potential for landslides or the failure of natural slopes to impact Site development is low.

- Based on dam inundation maps available in the General Plan and through the OES, the Site is not depicted within the delineated flooded areas for the vicinity reservoirs/dams. The inundation area for Emerald Lake extends to within 200 feet of the Site however.

- Based on tsunami mapping in the General Plan and the distance of the Site from any large lakes or reservoirs, the potential for a tsunami or seiche to impact the Site appears low.

- The Site is located within Flood Zone X, areas outside the 0.2% annual chance flood.

- There are no major volcanic areas nearby with recognized potential to impact the Site.

- According to the California Department of Conservation General Location Guide for Ultramafic Rocks in California (CDC, 2000), ultramafic outcrops are located 2 miles west-southwest of the Site, within the DTSC guidelines which trigger NOA sampling. Based on this information, soil sampling for NOA fibers should be conducted.

- Twenty three percent of the State radon testing results indicated radon concentrations exceeding 4 pCi/L. San Mateo County is reported in Federal EPA Radon Zone 2, with average indoor radon levels between 2 and 4 pCi/l. Based on the test data, there is a low probability of radon exceeding the action level.

6.2 Environmental and Facilities Safety Hazards

- There was no evidence of historical agricultural cultivation of the Site, but there are aged structures currently and previously located on the Site. Residual agricultural chemicals and lead related to potential use of LBP on the existing and historical structures, may be present in Site soil at elevated concentrations. Soil quality investigation should be performed to evaluate the presence of residual agricultural chemicals and related metals, as well as lead, in Site soils and to compare concentrations, if present, to current DTSC school standards.

- No gas production wells or plugged dry hole are located on or within 1,500 feet of the Site.

- No significant hazardous materials/waste facilities and/or solid waste-related facilities appear located within ¼ mile of the Site.

- No PG&E natural gas pipelines with operating pressures exceeding 80 psig were reported within 1,500 feet of the Site. No hazardous materials or natural gas pipelines operated by other companies are reported within 1,500 feet of the Site.

- Several 12-inch diameter RCDPW water lines are located within 1,500 feet of the Site, and three 5-foot diameter Hetch-Hetchy water pipelines are located in and easement adjoining and potentially on a portion of the Site. Based on location of these water pipelines within a 1,500-foot radius of the Site, a pipeline risk analysis is required by the CDE. No RCDPW pressurized sewer lines are located within 1,500 feet of the Site.

- Power lines in the immediate vicinity of the Site are reported to be 4 kV distribution lines by PG&E. Based on the voltage, no setback is required.

- There are no significant permitted air emissions facilities located within ¼ mile of the Site.

- No railroad tracks are located within 1,500 feet of the Site.

- No airports are located within the CDE guideline of 2 nautical miles.

- Fuel or water ASTs are not present on or within 1,500 feet of the Site.

- No major traffic corridors are located within 500 feet of the Site.

6.3 Required Additional Studies

Based on the current Site and vicinity conditions, and the applicable standards followed in conducting this study, the following geological studies, soil quality studies, safety studies, and/or risk assessments appear required:

- To address the Site-specific potential for geologic hazards attributable to ground shaking, liquefaction, seismically- induced settlement, and expansive soils, subsurface geologic conditions should be evaluated through performance of a Site-specific geotechnical investigation.

- To address the potential for elevated concentrations of agricultural chemicals and related metals and lead to remain present in Site soils attributable to aged structures, and for NOA to be present, soil sampling and laboratory testing is recommended.

- To address the potential for radon to be a concern, Site-specific radon testing is recommended.

- To address the location of the Hetch-Hetchy pipelines and several 12-inch diameter water pipelines within 1,500 feet of the Site, a pipeline risk analysis in accordance with the School Site Selection and Approval Guide requirements is required.

7.0 REFERENCES

California Air Resources Board. *Facility Search Engine*. https://www.arb.ca.gov/app/emsinv/facinfo/facinfo.php?dd=

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National Pipeline Mapping System, Public Map Viewer website: https://www.npms.phmsa.dot.gov/PublicViewer/.

Pacific Gas and Electric Company, Mr. Eric Alvarado, exas@pge.com.

Pacific Gas and Electric Company, Mr. Michael Allen, mjam@pge.com.

Redwood City Community GIS. http://webgis.redwoodcity.org/community/.

Redwood City Department of Public Works, Mr. Jeff Chou, 650) 780-7362, jchou@redwoodcity.org.

San Mateo County Environmental Health Department, https://ehesubmit.smchealth.org/servlet/guest?service=0&formId=88&saveAction=2&enterprise=9.

State of California Division of Oil, Gas, and Geothermal Resources website. http://www.conservation.ca.gov/dog/Pages/WellFinder.aspx.

SWRCB Geotracker website. http://www.geotracker.swrcb.ca.gov.

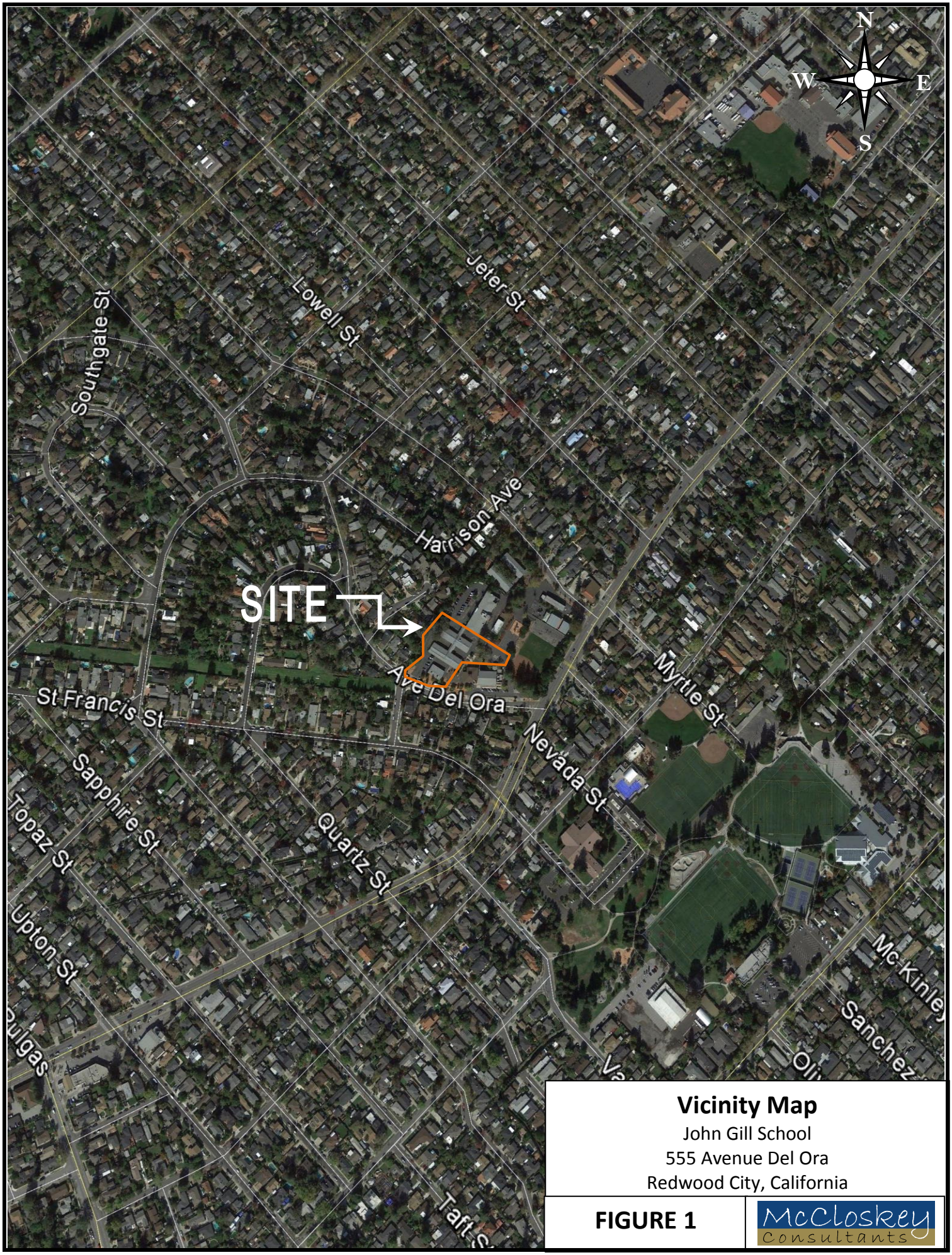
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8.0 LIMITATIONS

The conclusions and recommendations presented in this CDE/CCR Title 5 Geologic and Environmental Safety Hazards Evaluation were based on reasonably observable Site conditions and publicly accessible information, including documents provided and/or prepared by others.

MCI is not responsible for the accuracy of the data provided by others. Publicly accessible information cannot be relied upon to definitively confirm or deny the existence of recognized environmental conditions at the Site. No warranty, expressed or implied, has been made, except that the services have been performed in general accordance with California Education Code 17212.5 for geologic studies and California Department of Education (CDE)/California Code of Regulations (CCR), Title 5, Sections 14010, et. seq. for environmental studies.

FIGURES



Vicinity Map

John Gill School
555 Avenue Del Ora
Redwood City, California

FIGURE 1

McCloskey Consultants



Site Plan

John Gill School
555 Avenida Del Ora
Redwood City, California

FIGURE 2

McCloskey Consultants

APPENDIX A

EDR REGULATORY AGENCY DATABASE REPORT

John Gill Elementary School
555 Avenue Del Ora
Redwood City, CA 94062

Inquiry Number: 4955887.16s
June 05, 2017

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

555 AVENUE DEL ORA
REDWOOD CITY, CA 94062

COORDINATES

Latitude (North):	37.4743900 - 37° 28' 27.80''
Longitude (West):	122.2405580 - 122° 14' 26.00''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	567152.2
UTM Y (Meters):	4147566.5
Elevation:	59 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5640620 PALO ALTO, CA
Version Date:	2012
Southwest Map:	5640628 WOODSIDE, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140608
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
555 AVENUE DEL ORA
REDWOOD CITY, CA 94062

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	REDWOOD CITY SD-JOHN	555 AVENUE DEL ORA	HAZNET		TP
A2	REDWOOD CITY SCHOOL	555 AVENUE DE ORA	RCRA-SQG, FINDS, ECHO, HAZNET		TP
A3	REDWOOD CITY SD-JOHN	555 AVENUE DEL ORA	HAZNET		TP
B4	CITY OF REDWOOD CITY	2190 JEFFERSON	SWEEPS UST	Lower	112, 0.021, ENE
B5	FIRE STATION #10	2190 JEFFERSON	San Mateo Co. BI	Lower	112, 0.021, ENE
6	WEST BAY MOBILE AUTO	1135 HARRISON AVE	EDR Hist Auto	Lower	124, 0.023, North
7	GLOBAL GARAGE LLC	1105 MADISON AVE	EDR Hist Auto	Lower	648, 0.123, East
8	PATRICIAN FINISHES	322 KING ST	RCRA-SQG	Lower	1099, 0.208, NNW
9	JEFFERSON CHEVRON	3139 JEFFERSON AVE	LUST, HIST UST	Higher	2073, 0.393, SW
C10	REDWOOD CITY SCHOOL	601 JAMES AVE.	LUST, UST, SWEEPS UST, HIST UST	Lower	2091, 0.396, NNE
C11	REDWOOD CITY SCHOOL	601 JAMES	LUST, HIST CORTESE	Lower	2091, 0.396, NNE
12	ROBISON PROPERTY	827 EL CAMINO REAL	ENVIROSTOR, SLIC, VCP	Lower	4278, 0.810, NNE
13	TOWNE FORD SALES	1601 EL CAMINO REAL	LUST, HIST UST, Notify 65	Lower	4287, 0.812, ENE
14	FORMER DEMMA PARCELS	104 AND 112 CEDAR	ENVIROSTOR	Lower	4716, 0.893, ENE
15	ARTON MANAGEMENT/INV	570 EL CAMINO REAL	ENVIROSTOR, LUST, HIST UST	Lower	4877, 0.924, North
16	COOKS AUTO BODY	1104 MAIN STREET	RCRA-SQG, ENVIROSTOR, LUST, FINDS, ECHO	Lower	4961, 0.940, NE
17	OAK KNOLL STATION	590 CANYON ROAD	Notify 65	Higher	5260, 0.996, West

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
REDWOOD CITY SD-JOHN 555 AVENUE DEL ORA REDWOOD CITY, CA 94062	HAZNET GEPAID: CAC002604890	N/A
REDWOOD CITY SCHOOL 555 AVENUE DE ORA REDWOOD CITY, CA 94062	RCRA-SQG EPA ID:: CAD981162894 FINDS Registry ID:: 110002679290 ECHO HAZNET GEPAID: CAD981162894	CAD981162894
REDWOOD CITY SD-JOHN 555 AVENUE DEL ORA REDWOOD CITY, CA 94062	HAZNET GEPAID: CAC002579747	N/A

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

EXECUTIVE SUMMARY

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS ---------- Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG ---------- RCRA - Large Quantity Generators
RCRA-CESQG ---------- RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System
US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROL ---------- Sites with Institutional Controls

Federal ERNS list

ERNS ---------- Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE ---------- State Response Sites

State and tribal landfill and/or solid waste disposal site lists

SWF/LF ---------- Solid Waste Information System

State and tribal leaking storage tank lists

INDIAN LUST ---------- Leaking Underground Storage Tanks on Indian Land
SLIC ---------- Statewide SLIC Cases

State and tribal registered storage tank lists

FEMA UST ---------- Underground Storage Tank Listing
UST ---------- Active UST Facilities
AST ---------- Aboveground Petroleum Storage Tank Facilities
INDIAN UST ---------- Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

VCP ---------- Voluntary Cleanup Program Properties
INDIAN VCP ---------- Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS ---------- Considered Brownfieds Sites Listing

EXECUTIVE SUMMARY

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT ..... Waste Management Unit Database
SWRCY ..... Recycler Database
HAULERS ..... Registered Waste Tire Haulers Listing
INDIAN ODI ..... Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9 ..... Torres Martinez Reservation Illegal Dump Site Locations
ODI ..... Open Dump Inventory
IHS OPEN DUMPS ..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ..... Delisted National Clandestine Laboratory Register
HIST Cal-Sites ..... Historical Calsites Database
SCH ..... School Property Evaluation Program
CDL ..... Clandestine Drug Labs
Toxic Pits ..... Toxic Pits Cleanup Act Sites
US CDL ..... National Clandestine Laboratory Register

Local Lists of Registered Storage Tanks

HIST UST ..... Hazardous Substance Storage Container Database
CA FID UST ..... Facility Inventory Database

Local Land Records

LIENS ..... Environmental Liens Listing
LIENS 2 ..... CERCLA Lien Information
DEED ..... Deed Restriction Listing

Records of Emergency Release Reports

HMIRS ..... Hazardous Materials Information Reporting System
CHMIRS ..... California Hazardous Material Incident Report System
LDS ..... Land Disposal Sites Listing
MCS ..... Military Cleanup Sites Listing
SPILLS 90 ..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR ..... RCRA - Non Generators / No Longer Regulated
FUDS ..... Formerly Used Defense Sites
DOD ..... Department of Defense Sites
SCRD DRYCLEANERS ..... State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR ..... Financial Assurance Information
EPA WATCH LIST ..... EPA WATCH LIST
2020 COR ACTION ..... 2020 Corrective Action Program List

EXECUTIVE SUMMARY

TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
ROD	Records Of Decision
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
ICIS	Integrated Compliance Information System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
CONSENT	Superfund (CERCLA) Consent Decrees
INDIAN RESERV	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem
US MINES	Mines Master Index File
ABANDONED MINES	Abandoned Mines
UXO	Unexploded Ordnance Sites
DOCKET HWC	Hazardous Waste Compliance Docket Listing
FUELS PROGRAM	EPA Fuels Program Registered Listing
CA BOND EXP. PLAN	Bond Expenditure Plan
Cortese	"Cortese" Hazardous Waste & Substances Sites List
CUPA Listings	CUPA Resources List
DRYCLEANERS	Cleaner Facilities
EMI	Emissions Inventory Data
ENF	Enforcement Action Listing
Financial Assurance	Financial Assurance Information Listing
ICE	ICE
HWP	EnviroStor Permitted Facilities Listing
HWT	Registered Hazardous Waste Transporter Database
MINES	Mines Site Location Listing
MWMP	Medical Waste Management Program Listing
NPDES	NPDES Permits Listing
PEST LIC	Pesticide Regulation Licenses Listing
PROC	Certified Processors Database
UIC	UIC Listing
WASTEWATER PITS	Oil Wastewater Pits Listing
WDS	Waste Discharge System
WIP	Well Investigation Program Case List

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	EDR Proprietary Manufactured Gas Plants

EXECUTIVE SUMMARY

EDR Hist Cleaner..... EDR Exclusive Historic Dry Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF..... Recovered Government Archive Solid Waste Facilities List
RGA LUST..... Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA generators list

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 12/12/2016 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
PATRICIAN FINISHES	322 KING ST	NNW 1/8 - 1/4 (0.208 mi.)	8	12

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk

characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 01/30/2017 has revealed that there are 4 ENVIROSTOR sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ROBISON PROPERTY	***827 EL CAMINO REAL***	***NNE 1/2 - 1 (0.810 mi.)***	***12***	***32***
Facility Id: 60001444				
Status: Active				
FORMER DEMMA PARCELS	104 AND 112 CEDAR	ENE 1/2 - 1 (0.893 mi.)	14	36
Facility Id: 60001045				
Status: Refer: 1248 Local Agency				
ARTON MANAGEMENT/INV	***570 EL CAMINO REAL***	***N 1/2 - 1 (0.924 mi.)***	***15***	***37***
Facility Id: 41550010				
Status: Refer: Other Agency				
COOKS AUTO BODY	***1104 MAIN STREET***	***NE 1/2 - 1 (0.940 mi.)***	***16***	***40***
Facility Id: 60001847				
Status: Inactive - Action Required				

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 3 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
JEFFERSON CHEVRON	***3139 JEFFERSON AVE***	***SW 1/4 - 1/2 (0.393 mi.)***	***9***	***13***
Database: LUST REG 2, Date of Government Version: 09/30/2004				
Database: SAN MATEO CO. LUST, Date of Government Version: 03/15/2017				
Database: LUST, Date of Government Version: 03/13/2017				
Status: Open - Verification Monitoring				
Facility Status: Pollution Characterization				
Facility Id: 330179				
Facility Status: 5C- Pollution Characterization				
Global Id: T0608189635				
Global ID: T0608189635				

Lower Elevation	Address	Direction / Distance	Map ID	Page
REDWOOD CITY SCHOOL	***601 JAMES AVE.***	***NNE 1/4 - 1/2 (0.396 mi.)***	***C10***	***28***
Database: LUST REG 2, Date of Government Version: 09/30/2004				
Facility Status: Case Closed				
date9: 8/5/2002				
REDWOOD CITY SCHOOL	***601 JAMES***	***NNE 1/4 - 1/2 (0.396 mi.)***	***C11***	***30***
Database: SAN MATEO CO. LUST, Date of Government Version: 03/15/2017				
Database: LUST, Date of Government Version: 03/13/2017				
Status: Completed - Case Closed				

Facility Id: 330068
Facility Status: 9- Case Closed
Global Id: T0608100420
Global ID: T0608100420

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Registered Storage Tanks

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there is 1 SWEEPS UST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CITY OF REDWOOD CITY Status: A Comp Number: 330169	2190 JEFFERSON	ENE 0 - 1/8 (0.021 mi.)	B4	11

Other Ascertainable Records

Hazardous Materials Business Plan, Hazardous Waste Generator, Underground Storage tanks

A review of the San Mateo Co. BI list, as provided by EDR, and dated 03/15/2017 has revealed that there is 1 San Mateo Co. BI site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
FIRE STATION #10 Facility Id: FA0011296	2190 JEFFERSON	ENE 0 - 1/8 (0.021 mi.)	B5	11

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there is 1 HIST CORTESE site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
REDWOOD CITY SCHOOL Reg Id: 41-0441	***601 JAMES***	***NNE 1/4 - 1/2 (0.396 mi.)***	***C11***	***30***

Notify 65: Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

A review of the Notify 65 list, as provided by EDR, and dated 12/16/2016 has revealed that there are 2 Notify 65 sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
OAK KNOLL STATION	590 CANYON ROAD	W 1/2 - 1 (0.996 mi.)	17	55
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
TOWNE FORD SALES	***1601 EL CAMINO REAL***	***ENE 1/2 - 1 (0.812 mi.)***	***13***	***34***

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there are 2 EDR Hist Auto sites within approximately 0.125 miles of the target property.

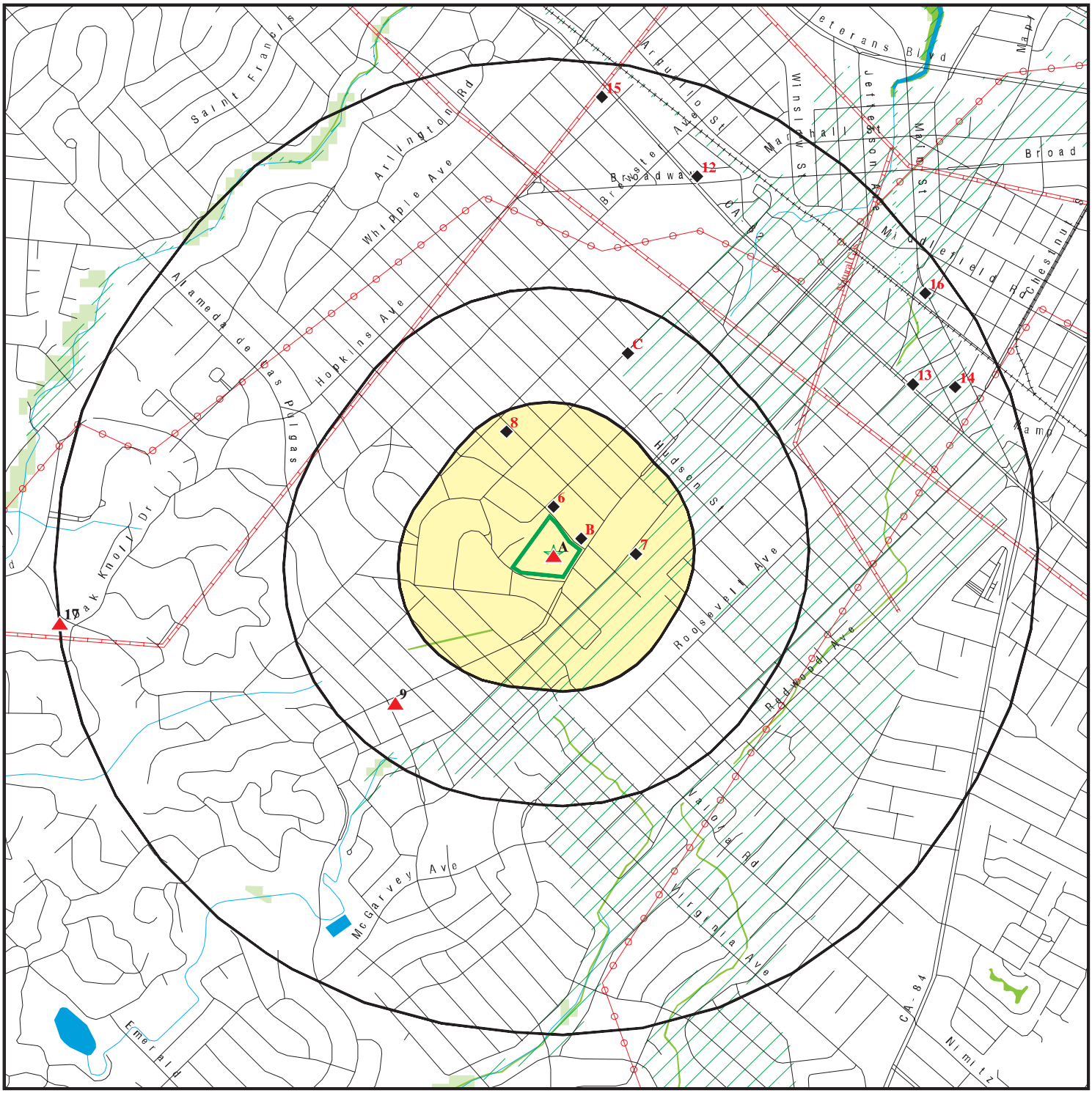
Lower Elevation	Address	Direction / Distance	Map ID	Page
WEST BAY MOBILE AUTO	1135 HARRISON AVE	N 0 - 1/8 (0.023 mi.)	6	12
GLOBAL GARAGE LLC	1105 MADISON AVE	E 0 - 1/8 (0.123 mi.)	7	12

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 2 records.

Site Name	Database(s)
SEQUOIA ALTERNATIVE SCHOOL	ENVIROSTOR, SCH
SEQUOIA STATION SHOPPING CENTER	ENVIROSTOR

OVERVIEW MAP - 4955887.16S



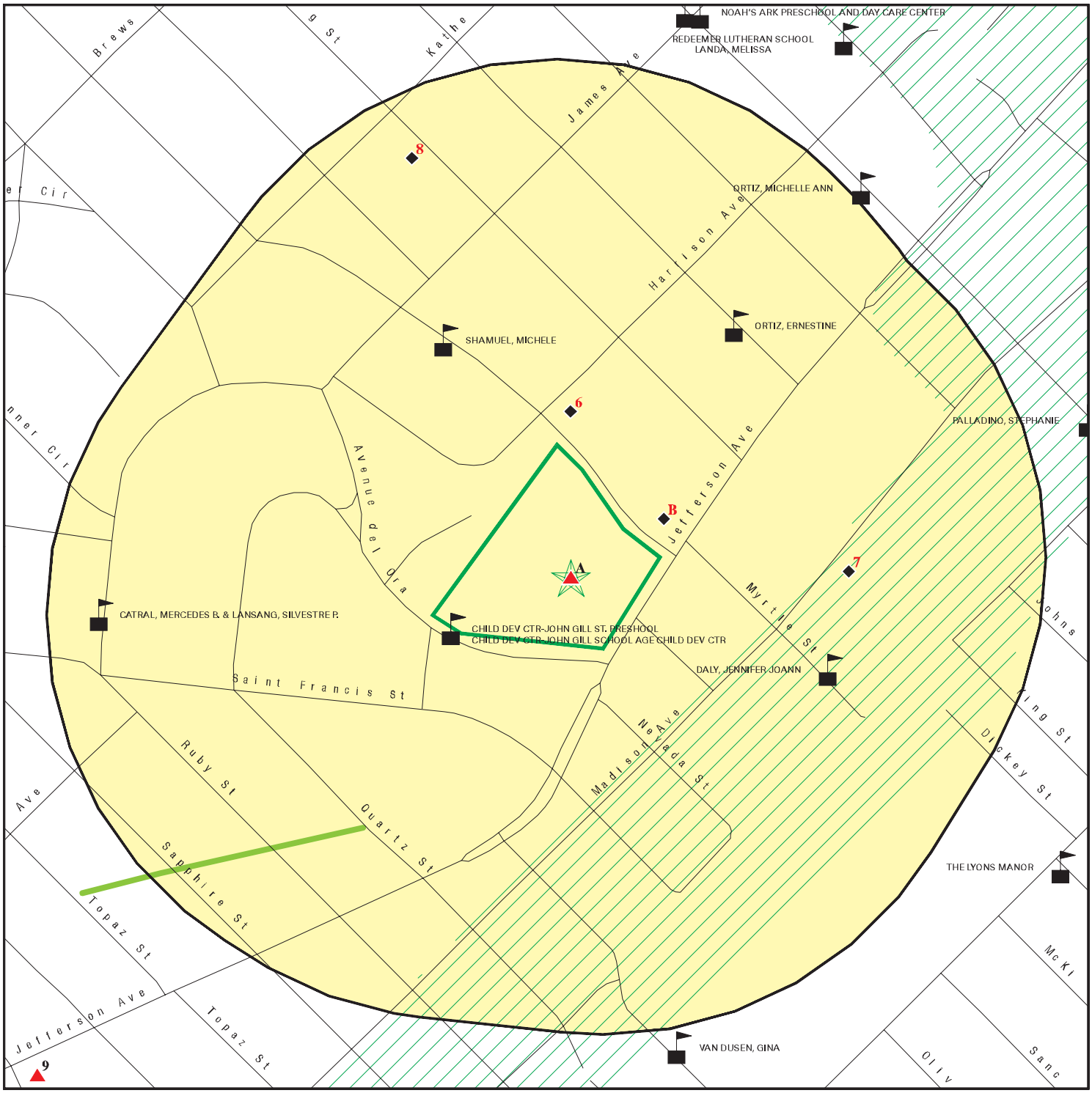
- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Pipelines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: John Gill Elementary School ADDRESS: 555 Avenue Del Ora Redwood City CA 94062 LAT/LONG: 37.47439 / 122.240558	CLIENT: McCloskey Consultants Inc CONTACT: Tom Mccloskey INQUIRY #: 4955887.16s DATE: June 05, 2017 10:10 am

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DETAIL MAP - 4955887.16S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

0 1/16 1/8 1/4 Miles

Indian Reservations BIA

100-year flood zone

500-year flood zone

National Wetland Inventory

State Wetlands

Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: John Gill Elementary School	CLIENT: McCloskey Consultants Inc
ADDRESS: 555 Avenue Del Ora Redwood City CA 94062	CONTACT: Tom Mccloskey
LAT/LONG: 37.47439 / 122.240558	INQUIRY #: 4955887.16s DATE: June 05, 2017 10:13 am

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	0.001		0	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250	1	0	1	NR	NR	NR	2
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		0	0	0	4	NR	4
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	0	3	NR	NR	3

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
SLIC	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		1	0	NR	NR	NR	1
HIST UST	0.250		0	0	NR	NR	NR	0
CA FID UST	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	0.001		0	NR	NR	NR	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.001		0	NR	NR	NR	NR	0
FINDS	0.001	1	0	NR	NR	NR	NR	1
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
ECHO	0.001	1	0	NR	NR	NR	NR	1
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
San Mateo Co. BI	0.250		1	0	NR	NR	NR	1
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	0.001		0	NR	NR	NR	NR	0
ENF	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
HAZNET	0.001	3	0	NR	NR	NR	NR	3
ICE	0.001		0	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	0	1	NR	NR	1
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.001		0	NR	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
PEST LIC	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	2	NR	2
UIC	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001		0	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		2	NR	NR	NR	NR	2
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		6	4	1	4	6	0	21

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 **REDWOOD CITY SD-JOHN GILL ELEMENTARY** **HAZNET** **S112954270**
Target Property **555 AVENUE DEL ORA** **N/A**
REDWOOD CITY, CA 94062

Site 1 of 3 in cluster A

Actual: 59 ft.

HAZNET:

envid:	S112954270
Year:	2006
GEPAID:	CAC002604890
Contact:	LEE CHANDLER
Telephone:	6505692374
Mailing Name:	Not reported
Mailing Address:	601 JAMES AVE
Mailing City,St,Zip:	REDWOOD CITY, CA 94062
Gen County:	Not reported
TSD EPA ID:	CAD028409019
TSD County:	Not reported
Waste Category:	Asbestos containing waste
Disposal Method:	Transfer Station
Tons:	0.21
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	San Mateo

A2 **REDWOOD CITY SCHOOL DIST** **RCRA-SQG** **1000438508**
Target Property **555 AVENUE DE ORA** **FINDS** **CAD981162894**
REDWOOD CITY, CA 94062 **ECHO**
HAZNET

Site 2 of 3 in cluster A

Actual: 59 ft.

RCRA-SQG:

Date form received by agency:	09/01/1996
Facility name:	REDWOOD CITY SCHOOL DIST
Facility address:	555 AVENUE DE ORA REDWOOD CITY, CA 94062
EPA ID:	CAD981162894
Mailing address:	815 ALLERTON ST REDWOOD CITY, CA 94063
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212

REDWOOD CITY SCHOOL DIST (Continued) **1000438508**

Legal status: District
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: REDWOOD CITY SCHOOL DIST
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: District
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 11/14/1985
Site name: REDWOOD CITY SCHOOL DIST
Classification: Large Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110002679290

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

REDWOOD CITY SCHOOL DIST (Continued) **1000438508**

Envid: 1000438508
Registry ID: 110002679290
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110002679290

HAZNET:
envid: 1000438508
Year: 1998
GEPAID: CAD981162894
Contact: Not reported
Telephone: 0000000000
Mailing Name: Not reported
Mailing Address: 2317 BROADWAY STE 10
Mailing City,St,Zip: REDWOOD CITY, CA 940631360
Gen County: Not reported
TSD EPA ID: CAL000027741
TSD County: Not reported
Waste Category: Asbestos containing waste
Disposal Method: Disposal, Land Fill
Tons: 2.5284
Cat Decode: Not reported
Method Decode: Not reported
Facility County: San Mateo

envid: 1000438508
Year: 1997
GEPAID: CAD981162894
Contact: Not reported
Telephone: 0000000000
Mailing Name: Not reported
Mailing Address: 2317 BROADWAY STE 10
Mailing City,St,Zip: REDWOOD CITY, CA 940631360
Gen County: Not reported
TSD EPA ID: CAD982042475
TSD County: Not reported
Waste Category: Asbestos containing waste
Disposal Method: Disposal, Land Fill
Tons: 10.1136
Cat Decode: Not reported
Method Decode: Not reported
Facility County: San Mateo

A3 **REDWOOD CITY SD-JOHN GILL ELEMENTARY** **HAZNET** **S112938963**
Target **555 AVENUE DEL ORA** **N/A**
Property **REDWOOD CITY, CA 94062**

Site 3 of 3 in cluster A

Actual: 59 ft.

HAZNET:
envid: S112938963
Year: 2004
GEPAID: CAC002579747
Contact: DON DIAS
Telephone: 6505692374
Mailing Name: Not reported
Mailing Address: 750 BRADFORD ST
Mailing City,St,Zip: REDWOOD CITY, CA 940631360
Gen County: Not reported

REDWOOD CITY SD-JOHN GILL ELEMENTARY (Continued) **S112938963**

TSD EPA ID: CAD028409019
TSD County: Not reported
Waste Category: Other organic solids
Disposal Method: Transfer Station
Tons: 0.08
Cat Decode: Not reported
Method Decode: Not reported
Facility County: San Mateo

B4
ENE
< 1/8
0.021 mi.
112 ft.

CITY OF REDWOOD CITY/FIRE STATION #2 **SWEEPS UST** **S106924633**
2190 JEFFERSON **N/A**
REDWOOD CITY, CA 94063

Site 1 of 2 in cluster B

Relative:
Lower

Actual:
37 ft.

SWEEPS UST:
Status: Active
Comp Number: 330169
Number: 4
Board Of Equalization: Not reported
Referral Date: 05-16-94
Action Date: 05-16-94
Created Date: 05-16-94
Owner Tank Id: Not reported
SWRCB Tank Id: Not reported
Tank Status: Not reported
Capacity: Not reported
Active Date: Not reported
Tank Use: Not reported
STG: Not reported
Content: Not reported
Number Of Tanks: Not reported

B5
ENE
< 1/8
0.021 mi.
112 ft.

FIRE STATION #10 **San Mateo Co. BI** **S113755647**
2190 JEFFERSON **N/A**
REDWOOD CITY, CA 94063

Site 2 of 2 in cluster B

Relative:
Lower

Actual:
37 ft.

San Mateo Co. BI:
Region: SAN MATEO
Facility ID: FA0011296
Prog Element Code: STORES MV FUELS OR WASTE ONLY
Record Id: PR0023517
Description: STORES MV FUELS OR WASTE ONLY
Facility Status: INACTIVE

Region: SAN MATEO
Facility ID: FA0011296
Prog Element Code: UNDERGROUND TANK - GENERAL
Record Id: PR0022463
Description: UNDERGROUND TANK - GENERAL
Facility Status: INACTIVE

6
North
< 1/8
0.023 mi.
124 ft.

WEST BAY MOBILE AUTO TRUCK SVC
1135 HARRISON AVE
REDWOOD CITY, CA 94062

EDR Hist Auto **1021288393**
N/A

Relative:
Lower

Actual:
36 ft.

EDR Hist Auto

Year:	Name:	Type:
2005	WEST BAY MOBILE AUTO TRUCK SVC	General Automotive Repair Shops
2006	WEST BAY MOBILE AUTO TRUCK SVC	General Automotive Repair Shops
2007	WEST BAY MOBILE AUTO TRUCK SVC	General Automotive Repair Shops
2008	WEST BAY MOBILE AUTO TRUCK SVC	General Automotive Repair Shops
2009	WEST BAY MOBILE AUTO TRUCK SVC	General Automotive Repair Shops
2010	WEST BAY MOBILE AUTO TRUCK SVC	General Automotive Repair Shops
2011	WEST BAY MOBILE AUTO TRUCK SVC	General Automotive Repair Shops
2012	WEST BAY MOBILE AUTO TRUCK SVC	General Automotive Repair Shops
2013	WEST BAY MOBILE AUTO TRUCK SVC	General Automotive Repair Shops
2014	WEST BAY MOBILE AUTO TRUCK SVC	General Automotive Repair Shops

---

7
East
< 1/8
0.123 mi.
648 ft.

GLOBAL GARAGE LLC
1105 MADISON AVE
REDWOOD CITY, CA 94061

EDR Hist Auto **1020274345**
N/A

Relative:
Lower

Actual:
34 ft.

EDR Hist Auto

Year:	Name:	Type:
2007	GLOBAL GARAGE LLC	General Automotive Repair Shops
2008	GLOBAL GARAGE LLC	General Automotive Repair Shops
2009	GLOBAL GARAGE LLC	General Automotive Repair Shops
2010	GLOBAL GARAGE LLC	General Automotive Repair Shops
2011	GLOBAL GARAGE LLC	General Automotive Repair Shops
2012	GLOBAL GARAGE LLC	General Automotive Repair Shops
2013	GLOBAL GARAGE LLC	General Automotive Repair Shops
2014	GLOBAL GARAGE LLC	General Automotive Repair Shops

8
NNW
1/8-1/4
0.208 mi.
1099 ft.

PATRICIAN FINISHES
322 KING ST
REDWOOD CITY, CA 94062

RCRA-SQG **1001959733**
CAR000060194

Relative:
Lower

Actual:
32 ft.

RCRA-SQG:

Date form received by agency:	12/09/1999
Facility name:	PATRICIAN FINISHES
Facility address:	322 KING ST REDWOOD CITY, CA 94062
EPA ID:	CAR000060194
Contact:	WILLIAM HASTY
Contact address:	322 KING ST REDWOOD CITY, CA 94062
Contact country:	US
Contact telephone:	(650) 369-9765
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator

PATRICIAN FINISHES (Continued) **1001959733**

Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	WILLIAM HASTY
Owner/operator address:	322 KING ST REDWOOD CITY, CA 94062
Owner/operator country:	Not reported
Owner/operator telephone:	(650) 222-4765
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

. Waste code: D001
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

---

9 SW 1/4-1/2 0.393 mi. 2073 ft.

Relative: Higher

Actual: 69 ft.

JEFFERSON CHEVRON **LUST U001594477**
3139 JEFFERSON AVE **HIST UST N/A**
REDWOOD CITY, CA 94061

LUST:

Region:	STATE
Global Id:	T0608189635
Latitude:	37.4697007062595
Longitude:	-122.246851846576
Case Type:	LUST Cleanup Site
Status:	Open - Verification Monitoring
Status Date:	07/27/2011
Lead Agency:	SAN MATEO COUNTY LOP
Case Worker:	DGM
Local Agency:	SAN MATEO COUNTY LOP
RB Case Number:	41-4019
LOC Case Number:	330179

JEFFERSON CHEVRON (Continued) **U001594477**

File Location: Local Agency
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Can be extracted from most recent report in Geotracker or at San Mateo County offices if submitted prior to 2005, San Mateo County does not take responsibility for the accuracy of the statements made or any professional interpretations made in the referenced report.

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0608189635
Contact Type: Local Agency Caseworker
Contact Name: DENO MILANO
Organization Name: SAN MATEO COUNTY LOP
Address: 2000 ALAMEDA DE LAS PULGAS
City: SAN MATEO
Email: dmilano@smcgov.org
Phone Number: 6503726292

Global Id: T0608189635
Contact Type: Regional Board Caseworker
Contact Name: Regional Water Board
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Address: 1515 CLAY ST SUITE 1400
City: OAKLAND
Email: Not reported
Phone Number: Not reported

Status History:
Global Id: T0608189635
Status: Open - Case Begin Date
Status Date: 06/03/1999

Global Id: T0608189635
Status: Open - Site Assessment
Status Date: 12/30/1999

Global Id: T0608189635
Status: Open - Verification Monitoring
Status Date: 07/27/2011

Regulatory Activities:
Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 09/05/2012
Action: Staff Letter - #20120905

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 07/17/2013
Action: Staff Letter - #20130717

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 05/07/2013
Action: Technical Correspondence / Assistance / Other - #20130507

JEFFERSON CHEVRON (Continued) **U001594477**

Global Id: T0608189635
Action Type: RESPONSE
Date: 05/15/2011
Action: Monitoring Report - Semi-Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/15/2010
Action: Electronic Reporting Submittal Due

Global Id: T0608189635
Action Type: RESPONSE
Date: 09/08/2008
Action: Other Report / Document

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/16/2015
Action: Soil Vapor Intrusion Investigation Report

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 02/14/2011
Action: Notice of Violation - #20110214

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 02/14/2017
Action: Email Correspondence - #20170214

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 01/24/2013
Action: Technical Correspondence / Assistance / Other - #20130124

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 10/04/2005
Action: Staff Letter - #20051004

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 08/19/2004
Action: Staff Letter - #20041019

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 05/30/2003
Action: Staff Letter - #20030530

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 07/15/2003
Action: Notice of Violation - #20030715

Global Id: T0608189635
Action Type: ENFORCEMENT

JEFFERSON CHEVRON (Continued) **U001594477**

Date: 09/13/2004
Action: Staff Letter - #20040913

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 05/15/2003
Action: Staff Letter - #20030515

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 08/06/2003
Action: Staff Letter - #20030806

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 12/15/2003
Action: Staff Letter - #20031215B

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 11/12/2003
Action: Verbal Enforcement - #20031112

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 09/12/2005
Action: Staff Letter - #20050912

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 08/27/2003
Action: Staff Letter - #20030827

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 09/04/2007
Action: Technical Correspondence / Assistance / Other - #20070904

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 02/24/2006
Action: Staff Letter - #20060224A

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 02/24/2006
Action: Staff Letter - #20060224

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 05/08/2006
Action: Staff Letter - #20060508

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 05/29/2003
Action: Staff Letter - #20030529A

JEFFERSON CHEVRON (Continued) **U001594477**

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 05/29/2003
Action: Staff Letter - #20030529B

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 09/05/2003
Action: Technical Correspondence / Assistance / Other - #20030905

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 07/15/2003
Action: Staff Letter - #20030715

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 08/27/2003
Action: Rescission of Enforcement Action - #20030827

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 11/03/2003
Action: Staff Letter - #20031103B

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 12/18/2003
Action: Technical Correspondence / Assistance / Other - #20031218

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 12/15/2003
Action: Staff Letter - #20031215A

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 03/15/2004
Action: Staff Letter - #20040315

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 05/08/2008
Action: Staff Letter - #20080508

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 02/03/2004
Action: Technical Correspondence / Assistance / Other - #20040203

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 09/03/2003
Action: Staff Letter - #20030903A

Global Id: T0608189635
Action Type: RESPONSE

JEFFERSON CHEVRON (Continued) **U001594477**

Date: 01/26/2003
Action: Other Workplan

Global Id: T0608189635
Action Type: RESPONSE
Date: 06/26/2003
Action: Other Report / Document

Global Id: T0608189635
Action Type: RESPONSE
Date: 05/15/2009
Action: Risk Assessment Report

Global Id: T0608189635
Action Type: RESPONSE
Date: 05/15/2008
Action: Monitoring Report - Semi-Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 12/10/2008
Action: Soil and Water Investigation Report

Global Id: T0608189635
Action Type: RESPONSE
Date: 12/31/2015
Action: Well Destruction Report

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 11/14/2007
Action: Staff Letter - #20071114

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 06/11/2007
Action: Notice of Violation - #20070611

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 11/14/2007
Action: Notice of Violation - #20071114

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 06/11/2007
Action: Staff Letter - #20070611

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 02/11/2004
Action: Staff Letter - #20040211B

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 07/14/1999
Action: Notice of Responsibility - #19990714

JEFFERSON CHEVRON (Continued) **U001594477**

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 01/28/2008
Action: Staff Letter - #20080128

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 01/26/2004
Action: Technical Correspondence / Assistance / Other - #20040126

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 12/11/2003
Action: Staff Letter - #20031211

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 11/16/2004
Action: Staff Letter - #20041116

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 02/10/2004
Action: Technical Correspondence / Assistance / Other - #20040210

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 03/18/2004
Action: Staff Letter - #20040318

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 09/09/2004
Action: Technical Correspondence / Assistance / Other - #20040904

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 07/27/2011
Action: Staff Letter - #20110727

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 09/02/2015
Action: Staff Letter - #20150902

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 07/26/2012
Action: Technical Correspondence / Assistance / Other - #20120726

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 07/26/2012
Action: Technical Correspondence / Assistance / Other - #20120726

Global Id: T0608189635
Action Type: ENFORCEMENT

JEFFERSON CHEVRON (Continued) **U001594477**

Date: 04/29/2013
Action: Notice of Violation - #20130429

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 07/23/2008
Action: Staff Letter - #20080723

Global Id: T0608189635
Action Type: RESPONSE
Date: 07/13/2005
Action: Soil and Water Investigation Workplan

Global Id: T0608189635
Action Type: RESPONSE
Date: 02/02/2006
Action: Soil and Water Investigation Report

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/04/2005
Action: NPDES / WDR Reports

Global Id: T0608189635
Action Type: RESPONSE
Date: 03/30/2004
Action: Electronic Reporting Submittal Due

Global Id: T0608189635
Action Type: RESPONSE
Date: 03/30/2004
Action: Other Workplan

Global Id: T0608189635
Action Type: RESPONSE
Date: 12/17/2009
Action: Clean Up Fund - 5-Year Review Summary

Global Id: T0608189635
Action Type: RESPONSE
Date: 05/15/2015
Action: Monitoring Report - Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/15/2015
Action: Electronic Reporting Submittal Due

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 03/04/2015
Action: Staff Letter - #20150304

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 05/22/2014
Action: Technical Correspondence / Assistance / Other - #20140522

JEFFERSON CHEVRON (Continued) **U001594477**

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 10/20/2014
Action: Staff Letter - #20141020

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 05/08/2013
Action: Staff Letter - #20130508

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 12/06/2016
Action: Staff Letter - #20161206

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 05/04/2016
Action: Notice of Violation - #20160524

Global Id: T0608189635
Action Type: RESPONSE
Date: 08/30/2010
Action: Risk Assessment Report

Global Id: T0608189635
Action Type: RESPONSE
Date: 01/26/2005
Action: Other Workplan

Global Id: T0608189635
Action Type: RESPONSE
Date: 01/26/2005
Action: Soil and Water Investigation Workplan - Addendum

Global Id: T0608189635
Action Type: RESPONSE
Date: 01/30/2010
Action: Other Report / Document

Global Id: T0608189635
Action Type: RESPONSE
Date: 03/26/2004
Action: Tank Removal Report / UST Sampling Report

Global Id: T0608189635
Action Type: RESPONSE
Date: 05/15/2016
Action: Monitoring Report - Annually

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 11/30/2009
Action: Staff Letter - #20091130

Global Id: T0608189635
Action Type: ENFORCEMENT

JEFFERSON CHEVRON (Continued) **U001594477**

Date: 01/04/2016
Action: Email Correspondence - #20160104

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 05/11/2016
Action: Staff Letter - #20160511

Global Id: T0608189635
Action Type: RESPONSE
Date: 10/17/2008
Action: Clean Up Fund - 5-Year Review Summary

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/15/2011
Action: Electronic Reporting Submittal Due

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 01/19/2017
Action: Email Correspondence - #20170119

Global Id: T0608189635
Action Type: Other
Date: 07/15/1999
Action: Leak Reported

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/15/2012
Action: Electronic Reporting Submittal Due

Global Id: T0608189635
Action Type: RESPONSE
Date: 05/15/2012
Action: Monitoring Report - Annually

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 11/26/2003
Action: Staff Letter - #20031126

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 05/18/2005
Action: Staff Letter - #20050518

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 11/03/2003
Action: Staff Letter - #20031103A

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 04/30/2013
Action: Staff Letter - #20130430

JEFFERSON CHEVRON (Continued) **U001594477**

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 12/27/2012
Action: Notice of Violation - #20121227

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/15/2008
Action: Monitoring Report - Semi-Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/15/2009
Action: Monitoring Report - Semi-Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 09/30/2007
Action: Other Report / Document

Global Id: T0608189635
Action Type: RESPONSE
Date: 10/27/2003
Action: Correspondence

Global Id: T0608189635
Action Type: RESPONSE
Date: 05/15/2009
Action: Monitoring Report - Semi-Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 03/30/2004
Action: Correspondence

Global Id: T0608189635
Action Type: RESPONSE
Date: 06/22/2005
Action: Well Installation Report

Global Id: T0608189635
Action Type: RESPONSE
Date: 05/15/2010
Action: Monitoring Report - Semi-Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 01/26/2004
Action: Other Workplan

Global Id: T0608189635
Action Type: RESPONSE
Date: 04/20/2004
Action: Soil and Water Investigation Workplan

Global Id: T0608189635
Action Type: RESPONSE

JEFFERSON CHEVRON (Continued) **U001594477**

Date: 05/16/2005
Action: Monitoring Report - Semi-Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 05/15/2006
Action: Monitoring Report - Semi-Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 05/15/2007
Action: Monitoring Report - Semi-Annually

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 08/05/2009
Action: Staff Letter - #20090805

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 09/03/2003
Action: Staff Letter - #20030903B

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 09/17/2003
Action: Staff Letter - #20030917

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 08/19/2004
Action: Staff Letter - #20040819A

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 05/09/2013
Action: Notice of Responsibility - #20130509

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/14/2008
Action: Risk Assessment Report

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/15/2016
Action: Electronic Reporting Submittal Due

Global Id: T0608189635
Action Type: RESPONSE
Date: 05/15/2014
Action: Monitoring Report - Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 05/15/2013
Action: Monitoring Report - Annually

JEFFERSON CHEVRON (Continued) **U001594477**

Global Id: T0608189635
Action Type: RESPONSE
Date: 04/10/2014
Action: Soil Vapor Intrusion Investigation Report

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/15/2013
Action: Electronic Reporting Submittal Due

Global Id: T0608189635
Action Type: RESPONSE
Date: 10/31/2012
Action: Soil Vapor Intrusion Investigation Workplan - Regulator Responded

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 02/28/2012
Action: Staff Letter - #20120228

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 12/28/2016
Action: Email Correspondence - #20161228

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 09/09/2015
Action: Staff Letter - #20150909

Global Id: T0608189635
Action Type: RESPONSE
Date: 07/15/2003
Action: NPDES / WDR Reports

Global Id: T0608189635
Action Type: RESPONSE
Date: 04/26/2004
Action: NPDES / WDR Reports

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/28/2007
Action: Risk Assessment Report

Global Id: T0608189635
Action Type: RESPONSE
Date: 08/29/2007
Action: Other Workplan

Global Id: T0608189635
Action Type: RESPONSE
Date: 06/04/2008
Action: Soil and Water Investigation Report

Global Id: T0608189635
Action Type: ENFORCEMENT

JEFFERSON CHEVRON (Continued) **U001594477**

Date: 08/01/2003
Action: Injunctive Relief

Global Id: T0608189635
Action Type: Other
Date: 06/03/1999
Action: Leak Discovery

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 02/11/2004
Action: Staff Letter - #20040211A

Global Id: T0608189635
Action Type: RESPONSE
Date: 09/08/2003
Action: Soil and Water Investigation Report

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/15/2004
Action: Monitoring Report - Semi-Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/15/2005
Action: Monitoring Report - Semi-Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/15/2006
Action: Monitoring Report - Semi-Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/15/2007
Action: Monitoring Report - Semi-Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 12/09/2004
Action: Other Report / Document

Global Id: T0608189635
Action Type: RESPONSE
Date: 01/26/2005
Action: Other Report / Document

Global Id: T0608189635
Action Type: RESPONSE
Date: 01/26/2005
Action: Monitoring Report - Other

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/15/2014
Action: Electronic Reporting Submittal Due

JEFFERSON CHEVRON (Continued) **U001594477**

Global Id: T0608189635
Action Type: REMEDIATION
Date: 06/03/1999
Action: Excavation

Global Id: T0608189635
Action Type: REMEDIATION
Date: 01/16/2004
Action: Pump & Treat (P&T) Groundwater

Global Id: T0608189635
Action Type: REMEDIATION
Date: 01/12/2004
Action: Excavation

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Pollution Characterization
Case Number: 330179
How Discovered: SA
Leak Cause: Unknown
Leak Source: Unknown
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: 12/30/1999
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

SAN MATEO CO. LUST:
Region: SAN MATEO
Facility ID: 330179
Facility Status: 5C- Pollution Characterization
Global ID: T0608189635
APN Number: 058322100
Case Type: SAN MATEO CO. LUST
EDR Link ID: SAN MATEO CO. LUST

HIST UST:
File Number: 0002C014
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002C014.pdf
Region: STATE
Facility ID: 00000058986
Facility Type: Gas Station
Other Type: Not reported
Contact Name: MICHAEL J. MACCHIA
Telephone: 4153663789
Owner Name: MAC-GO INC.
Owner Address: 868 ALTOS OAKS DR.
Owner City,St,Zip: LOS ALTOS, CA 94022
Total Tanks: 0005

JEFFERSON CHEVRON (Continued) **U001594477**

Tank Num: 001
Container Num: 1
Year Installed: Not reported
Tank Capacity: 00004000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Tank Num: 002
Container Num: 2
Year Installed: Not reported
Tank Capacity: 00000000
Tank Used for: PRODUCT
Type of Fuel: PREMIUM
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Tank Num: 003
Container Num: 3
Year Installed: Not reported
Tank Capacity: 00000000
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Container Construction Thickness: Not reported
Leak Detection: None

Tank Num: 004
Container Num: 4
Year Installed: Not reported
Tank Capacity: 00008000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Tank Num: 005
Container Num: 5
Year Installed: Not reported
Tank Capacity: 00004000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Click here for Geo Tracker PDF:

C10 **REDWOOD CITY SCHOOL DISTRICT** **LUST** **U001594512**
NNE **601 JAMES AVE.** **UST** **N/A**
1/4-1/2 **REDWOOD CITY, CA 94062** **SWEEPS UST**
0.396 mi. **HIST UST**
2091 ft. **Site 1 of 2 in cluster C**

Relative:
Lower

Actual:
22 ft.

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 330068

REDWOOD CITY SCHOOL DISTRICT (Continued) **U001594512**

How Discovered: OM
Leak Cause: Unknown
Leak Source: Unknown
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

UST:
Facility ID: 41-000-330153
Permitting Agency: SAN MATEO COUNTY
Latitude: 37.48086
Longitude: -122.23761

Facility ID: Not reported
Permitting Agency: San Mateo County Environmental Health
Latitude: 37.480701
Longitude: -122.237549

SWEEPS UST:
Status: Active
Comp Number: 330153
Number: 6
Board Of Equalization: Not reported
Referral Date: 05-14-94
Action Date: 05-14-94
Created Date: 04-26-93
Owner Tank Id: L212006-01
SWRCB Tank Id: 41-000-330153-000001
Tank Status: A
Capacity: 2500
Active Date: 04-07-94
Tank Use: M.V. FUEL
STG: P
Content: PRM UNLEADED
Number Of Tanks: 1

HIST UST:
File Number: Not reported
URL: Not reported
Region: STATE
Facility ID: 00000056768
Facility Type: Other
Other Type: VEHICLE YARD
Contact Name: DONALD K. MARCUS
Telephone: 4153644586
Owner Name: REDWOOD CITY SCHOOL DISTRICT
Owner Address: 815 ALLERTON STREET
Owner City,St,Zip: REDWOOD CITY, CA 94063
Total Tanks: 0003

Tank Num: 001

REDWOOD CITY SCHOOL DISTRICT (Continued) **U001594512**

Container Num:	59212-1
Year Installed:	1967
Tank Capacity:	00002000
Tank Used for:	PRODUCT
Type of Fuel:	PREMIUM
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor
Tank Num:	002
Container Num:	3
Year Installed:	Not reported
Tank Capacity:	00000200
Tank Used for:	WASTE
Type of Fuel:	WASTE OIL
Container Construction Thickness:	Not reported
Leak Detection:	None
Tank Num:	003
Container Num:	2
Year Installed:	Not reported
Tank Capacity:	00001000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor

C11 **REDWOOD CITY SCHOOL DISTR** **LUST** **S104161767**
NNE **601 JAMES** **HIST CORTESE** **N/A**
1/4-1/2 **REDWOOD CITY, CA 94063**
0.396 mi.
2091 ft. **Site 2 of 2 in cluster C**

Relative:
Lower

Actual:
22 ft.

LUST:

Region:	STATE
Global Id:	T0608100420
Latitude:	37.4816307
Longitude:	-122.2366291
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	08/05/2002
Lead Agency:	SAN MATEO COUNTY LOP
Case Worker:	DGM
Local Agency:	SAN MATEO COUNTY LOP
RB Case Number:	41-0441
LOC Case Number:	330068
File Location:	Local Agency
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0608100420
Contact Type:	Local Agency Caseworker
Contact Name:	DENO MILANO
Organization Name:	SAN MATEO COUNTY LOP
Address:	2000 ALAMEDA DE LAS PULGAS

REDWOOD CITY SCHOOL DISTR (Continued) **S104161767**

City: SAN MATEO
Email: dmilano@smcgov.org
Phone Number: 6503726292

Global Id: T0608100420
Contact Type: Regional Board Caseworker
Contact Name: Regional Water Board
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Address: 1515 CLAY ST SUITE 1400
City: OAKLAND
Email: Not reported
Phone Number: Not reported

Status History:
Global Id: T0608100420
Status: Completed - Case Closed
Status Date: 08/05/2002

Global Id: T0608100420
Status: Open - Case Begin Date
Status Date: 04/26/1990

Regulatory Activities:
Global Id: T0608100420
Action Type: Other
Date: 04/26/1990
Action: Leak Reported

Global Id: T0608100420
Action Type: ENFORCEMENT
Date: 04/26/1990
Action: Notice of Responsibility - #1

Global Id: T0608100420
Action Type: REMEDIATION
Date: 07/03/1989
Action: Excavation

Global Id: T0608100420
Action Type: REMEDIATION
Date: 07/03/1989
Action: Pump & Treat (P&T) Groundwater

SAN MATEO CO. LUST:
Region: SAN MATEO
Facility ID: 330068
Facility Status: 9- Case Closed
Global ID: T0608100420
APN Number: 052202010
Case Type: SAN MATEO CO. LUST
EDR Link ID: SAN MATEO CO. LUST

HIST CORTESE:
Region: CORTESE

REDWOOD CITY SCHOOL DISTR (Continued) **S104161767**

Facility County Code: 41
Reg By: LTNKA
Reg Id: 41-0441

12
NNE
1/2-1
0.810 mi.
4278 ft.

ROBISON PROPERTY
827 EL CAMINO REAL
REDWOOD CITY, CA 94063

ENVIROSTOR
SLIC
VCP

S106131297
N/A

Relative:
Lower

Actual:
17 ft.

ENVIROSTOR:
Facility ID: 60001444
Status: Active
Status Date: 04/12/2011
Site Code: 201905
Site Type: Voluntary Cleanup
Site Type Detailed: Voluntary Cleanup
Acres: 0.4
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Charles (Chip) Gribble
Supervisor: Julie Pettijohn
Division Branch: Cleanup Berkeley
Assembly: 24
Senate: 13
Special Program: Voluntary Cleanup Program
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Responsible Party
Latitude: 37.46007
Longitude: -122.1959
APN: NONE SPECIFIED
Past Use: DRY CLEANING
Potential COC: Tetrachloroethylene (PCE Trichloroethylene (TCE
Confirmed COC: 30022-NO 30027-NO
Potential Description: SOIL, SV, UE
Alias Name: T0608127441
Alias Type: GeoTracker Global ID
Alias Name: 201905
Alias Type: Project Code (Site Code)
Alias Name: 60001444
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: Not reported
Completed Sub Area Name: Not reported
Completed Document Type: Not reported
Completed Date: Not reported
Comments: Not reported

Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Site Screening
Future Due Date: 2017
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported

ROBISON PROPERTY (Continued) **S106131297**

Schedule Due Date: Not reported
Schedule Revised Date: Not reported

SLIC:

Region:	STATE
Facility Status:	**Open - Site Assessment**
Status Date:	05/05/2008
Global Id:	T0608127441
Lead Agency:	DEPARTMENT OF TOXIC SUBSTANCES CONTROL
Lead Agency Case Number:	60001444
Latitude:	37.485911
Longitude:	-122.234502
Case Type:	Cleanup Program Site
Case Worker:	Not reported
Local Agency:	SAN MATEO COUNTY LOP
RB Case Number:	Not reported
File Location:	Local Agency
Potential Media Affected:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	* Chlorinated Hydrocarbons
Site History:	Can be extracted from most recent report in Geotracker or at San Mateo County offices if submitted prior to 2005, San Mateo County does not take responsibility for the accuracy of the statements made or any professional interpretations made in the referenced report.

Click here to access the California GeoTracker records for this facility:

VCP:

Facility ID:	60001444
Site Type:	Voluntary Cleanup
Site Type Detail:	Voluntary Cleanup
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	0.4
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Charles (Chip) Gribble
Supervisor:	Julie Pettijohn
Division Branch:	Cleanup Berkeley
Site Code:	201905
Assembly:	24
Senate:	13
Special Programs Code:	Voluntary Cleanup Program
Status:	Active
Status Date:	04/12/2011
Restricted Use:	NO
Funding:	Responsible Party
Lat/Long:	37.46007 / -122.1959
APN:	NONE SPECIFIED
Past Use:	DRY CLEANING
Potential COC:	30022, 30027
Confirmed COC:	30022-NO,30027-NO
Potential Description:	SOIL, SV, UE
Alias Name:	T0608127441
Alias Type:	GeoTracker Global ID
Alias Name:	201905

ROBISON PROPERTY (Continued) **S106131297**

Alias Type: Project Code (Site Code)
Alias Name: 60001444
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: Not reported
Completed Sub Area Name: Not reported
Completed Document Type: Not reported
Completed Date: Not reported
Comments: Not reported

Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Site Screening
Future Due Date: 2017
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

13
ENE
1/2-1
0.812 mi.
4287 ft.

TOWNE FORD SALES **LUST** **1000311542**
1601 EL CAMINO REAL **HIST UST** **N/A**
REDWOOD CITY, CA 94063 **Notify 65**

Relative:
Lower

Actual:
18 ft.

LUST:
Region: STATE
Global Id: T0608100547
Latitude: 37.4799709412402
Longitude: -122.225475311279
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 10/12/1995
Lead Agency: SAN MATEO COUNTY LOP
Case Worker: DGM
Local Agency: SAN MATEO COUNTY LOP
RB Case Number: 41-0573
LOC Case Number: 330023
File Location: Local Agency
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Waste Oil / Motor / Hydraulic / Lubricating
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0608100547
Contact Type: Local Agency Caseworker
Contact Name: DENO MILANO
Organization Name: SAN MATEO COUNTY LOP
Address: 2000 ALAMEDA DE LAS PULGAS
City: SAN MATEO
Email: dmilano@smcgov.org
Phone Number: 6503726292

Global Id: T0608100547
Contact Type: Regional Board Caseworker

TOWNE FORD SALES (Continued) **1000311542**

Contact Name: Regional Water Board
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Address: 1515 CLAY ST SUITE 1400
City: OAKLAND
Email: Not reported
Phone Number: Not reported

Status History:
Global Id: T0608100547
Status: Completed - Case Closed
Status Date: 10/12/1995

Global Id: T0608100547
Status: Open - Case Begin Date
Status Date: 12/20/1988

Regulatory Activities:
Global Id: T0608100547
Action Type: Other
Date: 12/22/1988
Action: Leak Discovery

Global Id: T0608100547
Action Type: ENFORCEMENT
Date: 05/28/1990
Action: Notice of Responsibility - #1

Global Id: T0608100547
Action Type: Other
Date: 12/20/1988
Action: Leak Reported

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 330023
How Discovered: OM
Leak Cause: Unknown
Leak Source: Unknown
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

SAN MATEO CO. LUST:
Region: SAN MATEO
Facility ID: 330023
Facility Status: 9- Case Closed
Global ID: T0608100547

TOWNE FORD SALES (Continued) **1000311542**

APN Number: 053185060
Case Type: SAN MATEO CO. LUST
EDR Link ID: SAN MATEO CO. LUST

HIST UST:
File Number: 0002C39C
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002C39C.pdf
Region: STATE
Facility ID: 00000004128
Facility Type: Other
Other Type: AUTO DEALER
Contact Name: TIM TOLAND
Telephone: 4153665744
Owner Name: TOWNE FORD SALES
Owner Address: 1601 EL CAMINO REAL
Owner City,St,Zip: REDWOOD CITY, CA 94063
Total Tanks: 0001

Tank Num: 001
Container Num: 1
Year Installed: 1956
Tank Capacity: 00001000
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Container Construction Thickness: Not reported
Leak Detection: None

Click here for Geo Tracker PDF:

NOTIFY 65:
Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Issue Date: Not reported
Incident Description: Not reported

---

14 **FORMER DEMMA PARCELS** **ENVIROSTOR** **S109422388**
ENE **104 AND 112 CEDAR** **N/A**
1/2-1 **REDWOOD CITY, CA 94063**
0.893 mi.
4716 ft.

Relative:
Lower

Actual:
19 ft.

ENVIROSTOR:
Facility ID: 60001045
Status: Refer: 1248 Local Agency
Status Date: 06/15/2006
Site Code: Not reported
Site Type: Evaluation
Site Type Detailed: Evaluation
Acres: 1
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Not reported
Supervisor: Referred - Not Assigned

FORMER DEMMA PARCELS (Continued) **S109422388**

Division Branch: Cleanup Berkeley
Assembly: 40
Senate: 23
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not Applicable
Latitude: 34.03204
Longitude: -117.1858
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: 60001045
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 06/15/2006
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

15
North
1/2-1
0.924 mi.
4877 ft.

ARTON MANAGEMENT/INVESTMENT COMPANY
570 EL CAMINO REAL
REDWOOD CITY, CA 94063

ENVIROSTOR **U001594591**
LUST **N/A**
HIST UST

Relative:
Lower

Actual:
22 ft.

ENVIROSTOR:
Facility ID: 41550010
Status: Refer: Other Agency
Status Date: 04/24/2002
Site Code: Not reported
Site Type: Evaluation
Site Type Detailed: Evaluation
Acres: Not reported
NPL: NO
Regulatory Agencies: SMBRP, SAN MATEO COUNTY
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Denise Tsuji
Division Branch: Cleanup Berkeley
Assembly: 22
Senate: 13
Special Program: Not reported
Restricted Use: NO

ARTON MANAGEMENT/INVESTMENT COMPANY (Continued) **U001594591**

Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 37.48894
Longitude: -122.2386
APN: 052181250
Past Use: RETAIL - SERVICE STATION, RETAIL - VEHICLES
Potential COC: * WASTE OIL & MIXED OIL TPH-diesel
Confirmed COC: TPH-diesel * WASTE OIL & MIXED OIL
Potential Description: SOIL
Alias Name: 052181250
Alias Type: APN
Alias Name: 41550010
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 02/28/1991
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 04/24/2002
Comments: Site screening completed. Site referred to San Mateo County Environmental Health Department.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

LUST:
Region: STATE
Global Id: T0608101054
Latitude: 37.488925
Longitude: -122.238638
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 04/30/1991
Lead Agency: SAN MATEO COUNTY LOP
Case Worker: DGM
Local Agency: SAN MATEO COUNTY LOP
RB Case Number: 41-1150
LOC Case Number: 330066
File Location: Local Agency Warehouse
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Not reported
Site History: Not reported

ARTON MANAGEMENT/INVESTMENT COMPANY (Continued) **U001594591**

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0608101054
Contact Type:	Local Agency Caseworker
Contact Name:	DENO MILANO
Organization Name:	SAN MATEO COUNTY LOP
Address:	2000 ALAMEDA DE LAS PULGAS
City:	SAN MATEO
Email:	dmilano@smcgov.org
Phone Number:	6503726292

Global Id:	T0608101054
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

Status History:

Global Id:	T0608101054
Status:	Completed - Case Closed
Status Date:	04/30/1991

Global Id:	T0608101054
Status:	Open - Case Begin Date
Status Date:	01/01/1989

Regulatory Activities:

Global Id:	T0608101054
Action Type:	ENFORCEMENT
Date:	01/01/1989
Action:	Notice of Responsibility - #1

Global Id:	T0608101054
Action Type:	Other
Date:	02/01/1990
Action:	Leak Reported

SAN MATEO CO. LUST:

Region:	SAN MATEO
Facility ID:	330066
Facility Status:	9- Case Closed
Global ID:	T0608101054
APN Number:	052181250
Case Type:	SAN MATEO CO. LUST
EDR Link ID:	SAN MATEO CO. LUST

HIST UST:

File Number:	0002C0B3
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002C0B3.pdf
Region:	STATE

ARTON MANAGEMENT/INVESTMENT COMPANY (Continued) **U001594591**

Facility ID:	00000009927
Facility Type:	Other
Other Type:	AUTO DEALERSHIP
Contact Name:	DENNIS HOYT, SERVICE MGR.
Telephone:	4153694131
Owner Name:	MRS. PAULINE M. BARNESON
Owner Address:	1523 HOPKINS ST
Owner City,St,Zip:	REDWOOD CITY, CA 94063
Total Tanks:	0001
Tank Num:	001
Container Num:	3
Year Installed:	Not reported
Tank Capacity:	00000200
Tank Used for:	WASTE
Type of Fuel:	WASTE OIL
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

Click here for Geo Tracker PDF:

---

16 **COOKS AUTO BODY** **RCRA-SQG** **1000272042**
NE **1104 MAIN STREET** **ENVIROSTOR** **CAD981457179**
1/2-1 **REDWOOD CITY, CA 94063** **LUST**
0.940 mi. **FINDS**
4961 ft. **ECHO**

Relative:
Lower

Actual:
14 ft.

RCRA-SQG:

Date form received by agency:	04/02/1986
Facility name:	COOKS AUTO BODY
Facility address:	1104 MAIN STREET REDWOOD CITY, CA 94063
EPA ID:	CAD981457179
Contact:	THOMAS FRISCHE
Contact address:	1104 MAIN STREET REDWOOD CITY, CA 94063
Contact country:	US
Contact telephone:	(415) 365-3206
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	WOODS AUTO BODY INC
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

COOKS AUTO BODY (Continued) **1000272042**

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

ENVIROSTOR:
Facility ID: 60001847
Status: Inactive - Action Required
Status Date: 01/31/2013
Site Code: 201958
Site Type: Evaluation
Site Type Detailed: Evaluation
Acres: 0.3
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: George Chow
Supervisor: Julie Pettijohn
Division Branch: Cleanup Berkeley
Assembly: 22
Senate: 13
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Responsible Party
Latitude: 37.48273
Longitude: -122.2259
APN: 053-138-010
Past Use: FUEL - VEHICLE STORAGE/ REFUELING
Potential COC: Lead
Confirmed COC: Lead
Potential Description: SOIL
Alias Name: 053-138-010

COOKS AUTO BODY (Continued) **1000272042**

Alias Type: APN
Alias Name: T0608183982
Alias Type: GeoTracker Global ID
Alias Name: 201958
Alias Type: Project Code (Site Code)
Alias Name: 60001847
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 07/27/2012
Comments: This letter from the San Mateo Groundwater Protection Program (GPP) to DTSC includes the GPP's case closure for the hydrocarbon releases at this site and refers the metals contamination to DTSC. A summary of the remedial activities completed to date (July 2012) and the closure rationale can be found in this document.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 01/28/2013
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

LUST:
Region: STATE
Global Id: T0608183982
Latitude: 37.4829524
Longitude: -122.226044167
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 03/22/2013
Lead Agency: SAN MATEO COUNTY LOP
Case Worker: DGM
Local Agency: SAN MATEO COUNTY LOP
RB Case Number: 41-4057
LOC Case Number: 330188
File Location: Local Agency
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Extracted from Golden Gate Environmental's March 31, 2010 Report of Groundwater Monitoring & Additional Site Characterization, San Mateo County does not take responsibility for the accuracy of the statements made or any professional interpretations made in the referenced report. The subject property lies on the west side of Main Street and south of the intersection of Main and Maple Streets in

COOKS AUTO BODY (Continued) **1000272042**

Redwood City, California. The Site is approximately 0.4 mile south of the San Francisco Bay (Redwood Creek Inlet). The elevation of the property ranges between 11.70 and 12.38 feet above mean sea level. The property is relatively flat lying with the local topographic relief generally directed towards the north-northeast. The 0.3-acre property is roughly triangular in shape. The adjacent property to the west (1090 Main Street) is a multi-residential apartment/townhouse complex. Directly to the northeast across Main Street is the former upholstery facility for Cooks Auto Body (1101\\% Main Street; currently vacant) and Bobs Auto Repair facility (415 Cassia Street). A 9,000 square foot office and warehouse structure occupies the central portion of the subject property and a small office structure (625 square feet) is situated along the southeastern portion of the Site. The northernmost portion of the Site is where the former fueling station was historically located and is the subject of this evaluation. County Assessor Recorders Parcel No. 053-138-010). Cooks Auto Body has leased the Site since 1979 for a vehicle repair operation. The Site had previously been occupied by another auto body facility since 1969. Reportedly, Cooks Auto Body has never dispensed fuel from the property since 1979. A concrete dispenser island 18 feet in length by 3 feet in width (east-west orientation) is located approximately 13 feet north of the central north side of the building structure. A hydraulic lift was formerly located approximately 7 feet north of the central north wall of the building structure. Based on recorded observations of the product and vent piping removed beneath the northern portion of the Site (May 2004), it is evident that at least three USTs were once present at the property prior to Cooks Auto Bodys initial occupancy in 1979. Historic businesses that formerly operated at the Site include: Strand and Brain garage (1931-1933), Strand and Furger Autos (1937), Tacoma Distributing Company/Brewers Agents (1939), and Ferris Miles Inc Wholesaler (1953). A Redwood City Tribune article titled Miles Selling Car Agency dated May 10, 1969, describes business operations conducted across the street at 1101 Main Street from the years 1939 to 1969 by the late Ferris Miles (deceased 1982). Miles apparently co-owned the property at 1104 Main Street during the time interval spanning from 1939 to 1969 and Ferris-Miles Dodge occupied the Site in the mid 1960s. Based on review of Sanborn Fire Insurance Maps, the northern portion of the property was historically occupied by a fuel dispensing station from 1932 through 1962. In February 2002, EnviroVision, Inc. drilled exploratory borings SB-1, SB-2 and SB-3 to a depth of 15 feet. The purpose of the drilling was to assess the potential impact to soil and groundwater from reported fuel dispensing activities at the Site. In letters dated May 20 and June 4, 2002, the GPP identified Woods Limited Partnership as the responsible party (RP). On August 28 and November 18, 2002, EnviroVision submitted their Work Plan for Additional Site Characterization and Groundwater Monitoring and addendum that was approved by the GPP in a letter dated December 30, 2002. On January 10, 2003, EnviroVision in collaboration with Norcal Geophysical Consultants, Inc. conducted a geophysical survey to both trace the lateral extent of subsurface vent and product lines using line-locating equipment and locate any abandoned USTs using ground penetrating radar. EnviroVision identified several subsurface anomalies largeenough to represent potential underground storage tanks located in the sidewalk of the Maple Street frontage. In March and April 2003, EnviroVision drilled one additional soil boring SB-4

COOKS AUTO BODY (Continued) **1000272042**

and installed three 2-inch groundwater monitor wells MW-1, MW-2 and MW-3. In May 2004, Golden Gate Tank Removal, Inc. (GGTR) excavated five shallow locations where the previous geophysical survey by EnviroVision had indicated potential underground storage tank (UST) locations. No USTs were discovered in the exploratory excavations. A metal product line was uncovered in excavation area A and one soil sample was recovered from beneath the product line at two feet below grade for laboratory analysis. In September 2004, GGTR traced the lateral extent of the subsurface product and vent lines by hand digging. GGTR collected soil samples PLA[2], PL2B[2], PL2C[2], PL2D[2], PL2D[3.5], PL3A[2], and PL3B[2] beneath the exposed product lines and subsequently removed exposed piping from the trenches. Approximately 70 feet of product pipe and 50 feet of vent pipe were removed from the property for disposal at the Circosta Iron & Metal Company. Excavated soil was returned to the product line trenches as backfill. GGTR drilled five (5) soil borings SB-5 through SB-9 to a depth of 20 feet at the property. Borings SB-7 and SB-9 were converted to respective 2-inch groundwater monitor wells MW-5 and MW-4. Three additional soil borings SB-PL2A, SB-PL2D, and SB-PL3B were drilled to 12 feet to assess the vertical extent of soil contamination beneath the former product lines. No abandoned USTs were located during the exploratory drilling. In February 2007, GGTR drilled exploratory boring SB-13 to approximately 28 fbg. Soil samples were collected continuously in the boring between 5 and 24 fbg. The boring encountered silty clay to a depth of 15 feet, silty sand from 15 to 20 feet, and sandy gravel from 20 to 28 feet. New slotted well casing was temporarily installed in boring SB-13 and a grab groundwater sample collected after 20 minutes of recharge at a depth of 8.2 feet. A series of four separate Hydropunch borings were then drilled northward of the SB-13 location to obtain grab groundwater samples at 15, 20, 27 and 35 feet below grade. In February 2007, GGTR submitted a traffic control plan to the City of Redwood City for temporary closure of the roadway and re-routing of vehicular traffic, and on March 29, 2007, GGTR drilled boring SB-12 to a depth of 27 fbg. Soil samples were collected continuously in the boring between 5 and 24 fbg. Boring SB-12 encountered silty clay to a depth of 15 feet, silty sand from 15 to 19 feet, and sandy gravel from 19 to 27 feet. Hydrocarbon odor was recognized in the 10 foot soil sample only. Two soil samples from depths of 10 and 15 feet were submitted for analysis of TPH as gasoline and BTEX. The boring was terminated in heaving sands that prevented sample recovery below 24 feet. New slotted well casing was temporarily installed in boring SB-12 and a grab groundwater sample collected after 15 minutes of recharge at a depth of 11.5 feet. A series of four separate Hydropunch borings were then drilled northward of the boring SB-12 location to obtain grab groundwater samples at 15, 20, and 27 feet below grade. In the 4th Hydropunch boring, no groundwater was recovered at the 35 foot target depth. New slotted well casing was temporarily installed in boring 4. However, no groundwater was recovered in the casing after 45 minutes and the sampling was abandoned due to time constraints for the temporary roadway closure. On February 27, 2007, GGTR drilled new monitor well MW-6 to approximately 20 fbg, using 8-inch diameter, continuous flight, hollow-stem augers. Monitoring well MW-6 was constructed of standard 2-inch diameter, flush-threaded, Schedule 40 Polyvinyl Chloride (PVC) factory slotted (0.010 inch) well screen (@ 5 to 20 fbg) and blank riser casing (@ 0.5 to 5 fbg). On March 14 and 30, 2007, GGTR

COOKS AUTO BODY (Continued) **1000272042**

continued thelateral and vertical delineation of the extent of soil contamination in the vicinity of former product/vent lines and the dispenser island. Handaugured borings were used to collect the soil samples at locations SB-11, SB-PL2A-E, SBPL2A- S, and SB-PL2D. Soil samples were collected from the borings for the laboratory analysis of lead, zinc, SVOCs, and TPH as Motor Oil. Due to difficult subsurface conditions, percussion drilling equipment was subsequently used to collect soil samples from borings SB-10, SBPL2A-NW, SB-PL2D-NW, and SB-PL2D-S. Boring SB-11 was proposed to a depth of five feet but encountered drilling refusal on concrete debris just below collection of the two foot soil sample. Between April 2003 and February 2004, EnviroVision conducted four consecutive quarterly monitoring and sampling events for the three onsite wells MW-1, MW-2, and MW-3. Additional details of each monitoring event are provided in respective reports issued by EnviroVision. Based on review of the EnviroVision March 2004 Groundwater Monitoring Report, the GPP in a letter dated May 17, 2004, requested that the quarterly monitoring and sampling frequency be reduced to semi-annual events (first and third quarters). Upon completing the installation of monitoring wells MW-4 and MW-5, GGTR conducted semiannual monitoring and sampling events for the five monitor wells between September 2004 and September 2006. GGTR in conjunction with Dysert Environmental, Inc., conducted semi-annual groundwater monitoring and sampling activities on March 27, 2007 for all six monitor wells at the Site. On March 14, 2007, Golden Gate Tank Removal, Inc. (GGTR) recovered five discrete soil samples using hand auger equipment from the former product/vent line removal trenches. The concrete surface was cored to allow hand-auger equipment to drill a 6-inch deep hole. Soil samples were recovered from a depth of 6-12 inches at each location using a slide hammer and brass sample liners. Between December 2007 and October 2008, Golden Gate Tank Removal, Inc. (GGTR) conducted semi-annual monitoring and sampling events for the six monitor wells. A gap in groundwater monitoring occurred from the end of 2008 through 2009. Semi-annual groundwater monitoring resumed at the Site during the first quarter of 2010, and was performed on January 27, 2010 by GGE. GGE submitted the Risk Assessment for Lead in Soil dated December 30, 2009, to address the residual lead-contaminated soil. The majority of the Site is characterized by lead concentrations within the range of expected background values for urban soils. Groundwater is not impacted by dissolved lead and the groundwater does not appear threatened by the residual lead. Two hotspots of lead contamination in soil exist above the residential ESL value of 200 mg/kg and one of the hotspots (at the building corner) exceeds the industrial ESL value of 750 mg/kg. The extent of lead contamination is not completely defined by existing soil sampling and the southern extent of lead in soil contamination beneath the building is not known. Three soil samples contain total lead concentrations above 1000 mg/kg (and elevated soluble lead) and could be considered a hazardous waste if excavated and transported offsite. As noted by the GPP in their April 23, 2008 letter, other areas of the Site with elevated lead concentrations above 100 mg/kg may also contain elevated soluble lead concentrations and upon excavation and profiling for offsite disposal, these soils could be classified as a California hazardous waste requiring special handling/disposal practices with significant increased cost. The Site is in commercial use as an automobile body repair shop and the area of lead impact is completely covered by asphalt/concrete. The current commercial land use at the Site is

COOKS AUTO BODY (Continued) **1000272042**

unlikely to present a complete pathway for the ingestion or inhalation of lead contaminated soil. The elevated concentrations of total lead in soil present a health hazard to children under future redevelopment scenarios involving sensitive land use such as residential, school, etc., where the contaminated soil may be exposed at the surface. Excavation and transport of the contaminated soil offsite to a sensitive land use would also present opportunities for exposure to children. Although no future redevelopment is planned at the Site by the current property owner, management of the lead contaminated soil appears necessary to prevent these potential future exposures, should there be a change in property ownership or redevelopment plans. GPP has indicated it will notify the Redwood City Building Department of the lead in soil condition to inhibit improper management and use of this soil from future re-development activities. GGE also recommended the owner implement a Soil Management Plan to track and manage the contaminated soil during future utility installation or other excavation activities.

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0608183982
Contact Type:	Local Agency Caseworker
Contact Name:	DENO MILANO
Organization Name:	SAN MATEO COUNTY LOP
Address:	2000 ALAMEDA DE LAS PULGAS
City:	SAN MATEO
Email:	dmilano@smcgov.org
Phone Number:	6503726292

Global Id:	T0608183982
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

Status History:

Global Id:	T0608183982
Status:	Completed - Case Closed
Status Date:	03/22/2013

Global Id:	T0608183982
Status:	Open - Case Begin Date
Status Date:	02/21/2001

Global Id:	T0608183982
Status:	Open - Site Assessment
Status Date:	02/21/2001

Global Id:	T0608183982
Status:	Open - Site Assessment
Status Date:	03/14/2005

Global Id:	T0608183982

COOKS AUTO BODY (Continued) **1000272042**

Status: Open - Verification Monitoring
Status Date: 10/27/2010

Regulatory Activities:

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 12/31/2003
Action: Staff Letter - #20031231

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 06/29/2006
Action: Staff Letter - #20060629

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 02/14/2013
Action: Staff Letter - #20130214

Global Id: T0608183982
Action Type: RESPONSE
Date: 08/15/2003
Action: Electronic Reporting Submittal Due

Global Id: T0608183982
Action Type: RESPONSE
Date: 06/15/2004
Action: Monitoring Report - Other

Global Id: T0608183982
Action Type: RESPONSE
Date: 11/15/2004
Action: Monitoring Report - Semi-Annually

Global Id: T0608183982
Action Type: RESPONSE
Date: 11/15/2008
Action: Monitoring Report - Semi-Annually

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 02/06/2003
Action: Staff Letter - #20030206

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 04/09/2003
Action: Staff Letter - #20030409

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 02/26/2004
Action: Staff Letter - #20040226

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 12/28/2005

COOKS AUTO BODY (Continued) **1000272042**

Action: Staff Letter - #20051228

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 08/15/2006
Action: Technical Correspondence / Assistance / Other - #20060815

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 04/23/2008
Action: Staff Letter - #20080423

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 12/14/2006
Action: Staff Letter - #20061214

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 05/20/2008
Action: Staff Letter - #20080520

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 09/11/2006
Action: Meeting

Global Id: T0608183982
Action Type: RESPONSE
Date: 12/31/2010
Action: Correspondence

Global Id: T0608183982
Action Type: RESPONSE
Date: 07/22/2002
Action: Soil and Water Investigation Workplan

Global Id: T0608183982
Action Type: RESPONSE
Date: 11/15/2003
Action: Monitoring Report - Quarterly

Global Id: T0608183982
Action Type: RESPONSE
Date: 02/15/2004
Action: Monitoring Report - Quarterly

Global Id: T0608183982
Action Type: RESPONSE
Date: 08/15/2003
Action: Soil and Water Investigation Report

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 01/22/2007
Action: Staff Letter - #20070122

COOKS AUTO BODY (Continued) **1000272042**

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 09/09/2003
Action: Staff Letter - #20030909

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 07/23/2003
Action: Staff Letter - #20030723

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 05/17/2004
Action: Staff Letter - #20040517A

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 12/13/2004
Action: Technical Correspondence / Assistance / Other - #20041213

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 12/30/2002
Action: Staff Letter - #20021230

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 07/09/2008
Action: Staff Letter - #20080709

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 05/20/2002
Action: Staff Letter - #20020520

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 10/27/2010
Action: Staff Letter - #20101027

Global Id: T0608183982
Action Type: RESPONSE
Date: 08/15/2003
Action: Monitoring Report - Quarterly

Global Id: T0608183982
Action Type: RESPONSE
Date: 02/15/2003
Action: Monitoring Report - Quarterly

Global Id: T0608183982
Action Type: RESPONSE
Date: 05/15/2003
Action: Monitoring Report - Quarterly

Global Id: T0608183982
Action Type: RESPONSE

COOKS AUTO BODY (Continued) **1000272042**

Date: 09/30/2003
Action: Soil and Water Investigation Workplan

Global Id: T0608183982
Action Type: RESPONSE
Date: 02/19/2004
Action: Soil and Water Investigation Workplan - Addendum

Global Id: T0608183982
Action Type: RESPONSE
Date: 05/16/2005
Action: Monitoring Report - Semi-Annually

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 05/31/2012
Action: PRP Search Report

Global Id: T0608183982
Action Type: RESPONSE
Date: 11/26/2002
Action: Soil and Water Investigation Workplan - Addendum

Global Id: T0608183982
Action Type: RESPONSE
Date: 05/26/2003
Action: Soil and Water Investigation Report

Global Id: T0608183982
Action Type: RESPONSE
Date: 01/31/2003
Action: Soil and Water Investigation Workplan - Addendum

Global Id: T0608183982
Action Type: Other
Date: 09/02/2002
Action: Leak Reported

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 06/05/2012
Action: Notice of Violation - #20120605

Global Id: T0608183982
Action Type: RESPONSE
Date: 05/15/2011
Action: Monitoring Report - Annually

Global Id: T0608183982
Action Type: RESPONSE
Date: 05/15/2012
Action: Monitoring Report - Annually

Global Id: T0608183982
Action Type: RESPONSE
Date: 10/31/2012
Action: Well Destruction Report

COOKS AUTO BODY (Continued) **1000272042**

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 10/24/2002
Action: Staff Letter - #20021024

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 07/17/2003
Action: Staff Letter - #20030717

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 03/14/2005
Action: Staff Letter - #20050314

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 06/05/2002
Action: Notice of Responsibility - #20020605

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 05/17/2004
Action: Staff Letter - #20040517B

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 01/31/2013
Action: Notice of Violation - #20130131

Global Id: T0608183982
Action Type: RESPONSE
Date: 05/15/2009
Action: Monitoring Report - Semi-Annually

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 08/05/2009
Action: Staff Letter - #20090805

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 05/25/2004
Action: Staff Letter - #20040525

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 10/07/2009
Action: Notice of Violation - #20091007

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 10/28/2009
Action: Technical Correspondence / Assistance / Other - #20091028

Global Id: T0608183982
Action Type: ENFORCEMENT

COOKS AUTO BODY (Continued) **1000272042**

Date: 03/01/2006
Action: Notice of Violation - #20060301

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 11/22/2006
Action: Technical Correspondence / Assistance / Other - #20061122

Global Id: T0608183982
Action Type: RESPONSE
Date: 05/15/2004
Action: Monitoring Report - Quarterly

Global Id: T0608183982
Action Type: RESPONSE
Date: 05/30/2002
Action: Unauthorized Release Form

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 07/24/2012
Action: Referral to Other State Agency - #20120724

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 03/22/2013
Action: Closure/No Further Action Letter - #20130322

Global Id: T0608183982
Action Type: RESPONSE
Date: 05/15/2010
Action: Monitoring Report - Semi-Annually

Global Id: T0608183982
Action Type: RESPONSE
Date: 05/27/2005
Action: Electronic Reporting Submittal Due

Global Id: T0608183982
Action Type: RESPONSE
Date: 06/09/2005
Action: Soil and Water Investigation Workplan

Global Id: T0608183982
Action Type: RESPONSE
Date: 01/18/2007
Action: Soil and Water Investigation Report

Global Id: T0608183982
Action Type: RESPONSE
Date: 10/02/2006
Action: Soil and Water Investigation Workplan - Addendum

Global Id: T0608183982
Action Type: RESPONSE
Date: 06/09/2008
Action: Other Report / Document

COOKS AUTO BODY (Continued) **1000272042**

Global Id: T0608183982
Action Type: RESPONSE
Date: 11/19/2008
Action: Risk Assessment Report

Global Id: T0608183982
Action Type: Other
Date: 02/21/2002
Action: Leak Discovery

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 07/19/2012
Action: Staff Letter - #20120719

Global Id: T0608183982
Action Type: RESPONSE
Date: 11/15/2009
Action: Monitoring Report - Semi-Annually

Global Id: T0608183982
Action Type: RESPONSE
Date: 11/19/2008
Action: Soil and Water Investigation Report

Global Id: T0608183982
Action Type: RESPONSE
Date: 09/13/2004
Action: Soil and Water Investigation Report

Global Id: T0608183982
Action Type: RESPONSE
Date: 11/15/2005
Action: Monitoring Report - Semi-Annually

Global Id: T0608183982
Action Type: RESPONSE
Date: 05/15/2006
Action: Monitoring Report - Semi-Annually

Global Id: T0608183982
Action Type: RESPONSE
Date: 05/15/2007
Action: Monitoring Report - Semi-Annually

Global Id: T0608183982
Action Type: RESPONSE
Date: 05/15/2008
Action: Monitoring Report - Semi-Annually

Global Id: T0608183982
Action Type: RESPONSE
Date: 11/15/2006
Action: Monitoring Report - Semi-Annually

Global Id: T0608183982
Action Type: RESPONSE

COOKS AUTO BODY (Continued) **1000272042**

Date: 11/15/2007
Action: Monitoring Report - Semi-Annually

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Preliminary site assessment underway
Case Number: 330188
How Discovered: SA
Leak Cause: Unknown
Leak Source: Unknown
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: 2/21/2001
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

SAN MATEO CO. LUST:
Region: SAN MATEO
Facility ID: 330188
Facility Status: 9- Case Closed
Global ID: T0608183982
APN Number: 053138010
Case Type: SAN MATEO CO. LUST
EDR Link ID: SAN MATEO CO. LUST

FINDS:

Registry ID: 110001168888

Environmental Interest/Information System

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZARDOUS AIR POLLUTANT MAJOR

STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

COOKS AUTO BODY (Continued) **1000272042**

ECHO:
Envid: 1000272042
Registry ID: 110001168888
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110001168888

17
West
1/2-1
0.996 mi.
5260 ft.

Relative:
Higher

Actual:
173 ft.

OAK KNOLL STATION **Notify 65** **U000059129**
590 CANYON ROAD **N/A**
REDWOOD CITY, CA 92257

NOTIFY 65:
Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Issue Date: Not reported
Incident Description: Not reported

Count: 2 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
REDWOOD CITY	S109149555	SEQUOIA ALTERNATIVE SCHOOL	435, 455, 461 5TH AVENUE AND 4	94063	ENVIROSTOR, SCH
REDWOOD CITY	S105954452	SEQUOIA STATION SHOPPING CENTER	INTERSECTION OF EL CAMINO REAL	94063	ENVIROSTOR

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/05/2017
Date Data Arrived at EDR: 04/21/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 21

Source: EPA
Telephone: N/A
Last EDR Contact: 04/21/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 04/05/2017
Date Data Arrived at EDR: 04/21/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 21

Source: EPA
Telephone: N/A
Last EDR Contact: 04/21/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/05/2017
Date Data Arrived at EDR: 04/21/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 21

Source: EPA
Telephone: N/A
Last EDR Contact: 04/21/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/07/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 92

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 04/07/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 02/07/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 16

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/21/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 02/07/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 16

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/25/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/28/2016
Date Data Arrived at EDR: 01/04/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 93

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 05/15/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 11/15/2016
Date Data Arrived at EDR: 11/29/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 66

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/31/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 11/15/2016
Date Data Arrived at EDR: 11/29/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 66

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/31/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/26/2016
Date Data Arrived at EDR: 09/29/2016
Date Made Active in Reports: 11/11/2016
Number of Days to Update: 43

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 03/29/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Annually

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 01/30/2017
Date Data Arrived at EDR: 01/31/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 112

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 01/30/2017
Date Data Arrived at EDR: 01/31/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 112

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 02/13/2017
Date Data Arrived at EDR: 02/15/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 76

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 05/17/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)
Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/13/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 49
Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 03/14/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Quarterly

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22
Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35
Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14
Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List
Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30
Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29
Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Varies

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/14/2016
Date Data Arrived at EDR: 01/27/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 98

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Semi-Annually

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/07/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Quarterly

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/06/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Quarterly

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 10/01/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/17/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 09/01/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

SLIC: Statewide SLIC Cases (GEOTRACKER)
Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/13/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 49
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/14/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35
Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36
Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11
Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17
Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Annually

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55
Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 04/11/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Varies

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 03/12/2017
Date Data Arrived at EDR: 03/16/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 57
Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 03/16/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69
Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 03/24/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Quarterly

INDIAN UST R5: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 01/14/2017
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 10/01/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Semi-Annually

INDIAN UST R7: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/01/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/17/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 10/06/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Quarterly

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 10/14/2016
Date Data Arrived at EDR: 01/27/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 98

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Semi-Annually

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 10/07/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Quarterly

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 03/27/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 01/30/2017
Date Data Arrived at EDR: 01/31/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 112

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Quarterly

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 01/03/2017
Date Data Arrived at EDR: 01/04/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 57
Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 03/29/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 03/02/2017
Date Data Arrived at EDR: 03/02/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 36
Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/02/2017
Next Scheduled EDR Contact: 07/03/2017
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database
Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30
Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 03/13/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 50
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/14/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 01/13/2017
Date Data Arrived at EDR: 01/17/2017
Date Made Active in Reports: 05/31/2017
Number of Days to Update: 134
Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 05/15/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52
Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 05/01/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Varies

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39
Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137
Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176
Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 09/30/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 36
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/28/2017
Next Scheduled EDR Contact: 06/12/2017
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database
The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 01/30/2017
Date Data Arrived at EDR: 01/31/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 112

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 03/17/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 54

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 04/10/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/30/2016
Date Data Arrived at EDR: 12/05/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 67

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/31/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 03/09/2017
Date Data Arrived at EDR: 03/17/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 67

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database
The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CA FID UST: Facility Inventory Database
The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing
A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 03/06/2017
Date Data Arrived at EDR: 03/07/2017
Date Made Active in Reports: 04/21/2017
Number of Days to Update: 45

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014
Date Data Arrived at EDR: 03/18/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 37

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 04/21/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 03/06/2017
Date Data Arrived at EDR: 03/07/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 77

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 03/07/2017
Next Scheduled EDR Contact: 06/19/2017
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/28/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 37

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 03/29/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Annually

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/06/2016
Date Data Arrived at EDR: 01/25/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 105

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/13/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 49

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/14/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/13/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 49

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/14/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Varies

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015
Date Data Arrived at EDR: 07/08/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 02/24/2017
Next Scheduled EDR Contact: 06/05/2017
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/14/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/14/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63
Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/19/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 02/13/2017
Date Data Arrived at EDR: 02/15/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 86
Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 05/17/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88
Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 05/08/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6
Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/15/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 14
Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/24/2017
Next Scheduled EDR Contact: 07/03/2017
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 11/24/2015
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 133

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 05/26/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/26/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 74

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 03/06/2017
Next Scheduled EDR Contact: 06/19/2017
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 02/01/2017
Date Data Arrived at EDR: 02/09/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/21/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 10/17/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 3
Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 05/09/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 01/20/2016
Date Data Arrived at EDR: 04/28/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 127
Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/10/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 04/10/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 05/19/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 05/19/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016
Date Data Arrived at EDR: 09/08/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 43
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 05/08/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 03/06/2017
Next Scheduled EDR Contact: 06/19/2017
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 03/06/2017
Next Scheduled EDR Contact: 06/19/2017
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 01/04/2017
Date Data Arrived at EDR: 01/06/2017
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 35
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 04/06/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 09/30/2016
Date Data Arrived at EDR: 11/18/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 77

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 03/27/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 02/24/2015
Date Made Active in Reports: 09/30/2015
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 05/26/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/14/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 12/23/2016
Date Data Arrived at EDR: 12/27/2016
Date Made Active in Reports: 02/17/2017
Number of Days to Update: 52

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 12/05/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 04/21/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 03/07/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 03/07/2017
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/08/2017
Date Data Arrived at EDR: 02/28/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 38

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 05/31/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/31/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 03/14/2017
Date Data Arrived at EDR: 03/17/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 21

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 03/13/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 04/04/2017
Date Data Arrived at EDR: 04/07/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 35

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 04/07/2017
Next Scheduled EDR Contact: 06/19/2017
Data Release Frequency: Quarterly

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 03/19/2017
Date Data Arrived at EDR: 03/21/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 03/21/2017
Next Scheduled EDR Contact: 07/03/2017
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 10/25/2015
Date Data Arrived at EDR: 01/29/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 67

Source: Department of Defense
Telephone: 571-373-0407
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

DOCKET HWC: Hazardous Waste Compliance Docket Listing
A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 06/02/2016
Date Data Arrived at EDR: 06/03/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 91
Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing
This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/22/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 79
Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan
Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6
Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 12/28/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 64
Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 03/29/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Quarterly

DRYCLEANERS: Cleaner Facilities
A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 03/09/2017
Date Data Arrived at EDR: 04/11/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 42
Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Annually

EMI: Emissions Inventory Data
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 09/23/2016
Date Made Active in Reports: 10/24/2016
Number of Days to Update: 31
Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 03/21/2017
Next Scheduled EDR Contact: 07/03/2017
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 01/23/2017
Date Data Arrived at EDR: 01/27/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 118

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 04/25/2016
Date Data Arrived at EDR: 04/29/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 53

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 02/14/2017
Date Data Arrived at EDR: 02/17/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 97

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 05/15/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 10/12/2016
Date Made Active in Reports: 12/15/2016
Number of Days to Update: 64

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 04/14/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 11/21/2016
Date Data Arrived at EDR: 11/22/2016
Date Made Active in Reports: 01/23/2017
Number of Days to Update: 62

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing
Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 11/21/2016
Date Data Arrived at EDR: 11/22/2016
Date Made Active in Reports: 01/23/2017
Number of Days to Update: 62
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database
A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 04/11/2017
Date Data Arrived at EDR: 04/13/2017
Date Made Active in Reports: 04/26/2017
Number of Days to Update: 13
Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 04/13/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing
A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 09/12/2016
Date Data Arrived at EDR: 09/14/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 30
Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 03/13/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Varies

MWMP: Medical Waste Management Program Listing
The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 12/02/2016
Date Data Arrived at EDR: 12/06/2016
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 86
Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 03/07/2017
Next Scheduled EDR Contact: 06/19/2017
Data Release Frequency: Varies

NPDES: NPDES Permits Listing
A listing of NPDES permits, including stormwater.

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 11/15/2016
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 107
Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 05/17/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing
A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 12/06/2016
Date Data Arrived at EDR: 12/06/2016
Date Made Active in Reports: 03/03/2017
Number of Days to Update: 87
Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 03/07/2017
Next Scheduled EDR Contact: 06/19/2017
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 03/13/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 50
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/14/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 12/16/2016
Date Data Arrived at EDR: 12/22/2016
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 70
Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 04/03/2017
Next Scheduled EDR Contact: 07/03/2017
Data Release Frequency: No Update Planned

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 01/20/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 50
Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 03/14/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water board?s review found that more than one-third of the region?s active disposal pits are operating without permission.

Date of Government Version: 04/15/2015
Date Data Arrived at EDR: 04/17/2015
Date Made Active in Reports: 06/23/2015
Number of Days to Update: 67
Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 04/14/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9
Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Quarterly

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13
Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 03/24/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 04/10/2017
Date Data Arrived at EDR: 04/11/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 31

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 04/10/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Semi-Annually

Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 04/10/2017
Date Data Arrived at EDR: 04/11/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 21

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 04/10/2017
Next Scheduled EDR Contact: 04/24/2047
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA Facility List

Cupa Facility List

Date of Government Version: 03/06/2017
Date Data Arrived at EDR: 03/08/2017
Date Made Active in Reports: 04/14/2017
Number of Days to Update: 37

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA Facility Listing

Cupa facility list.

Date of Government Version: 01/31/2017
Date Data Arrived at EDR: 02/07/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 94

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 04/10/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 03/27/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 02/23/2017
Date Data Arrived at EDR: 02/24/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 77

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Varies

CONTRA COSTA COUNTY:

Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 11/17/2016
Date Data Arrived at EDR: 11/22/2016
Date Made Active in Reports: 01/26/2017
Number of Days to Update: 65

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 05/01/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA Facility List
Cupa Facility list

Date of Government Version: 01/31/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/14/2017
Number of Days to Update: 70

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 05/01/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 02/24/2017
Date Data Arrived at EDR: 02/28/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 73

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 05/01/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 04/06/2017
Date Data Arrived at EDR: 04/07/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 40

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 03/31/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 12/02/2016
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 111

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

HUMBOLDT COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 03/20/2017
Date Data Arrived at EDR: 03/21/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 57

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

IMPERIAL COUNTY:

CUPA Facility List

Cupa facility list.

Date of Government Version: 01/23/2017
Date Data Arrived at EDR: 01/25/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 36

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

INYO COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 03/09/2017
Date Data Arrived at EDR: 03/09/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 77

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 02/07/2017
Date Data Arrived at EDR: 02/10/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 81

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 03/06/2017
Date Data Arrived at EDR: 03/07/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 71

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

LAKE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 01/18/2017
Date Data Arrived at EDR: 01/20/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 41

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 04/17/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 11/30/2016
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 111

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 11/30/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206
Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 03/20/2017
Next Scheduled EDR Contact: 07/03/2017
Data Release Frequency: No Update Planned

HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 11/18/2016
Date Made Active in Reports: 01/23/2017
Number of Days to Update: 66
Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 04/10/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 04/17/2017
Date Data Arrived at EDR: 04/18/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 14
Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 04/18/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Varies

City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2016
Date Data Arrived at EDR: 01/26/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 56
Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 04/17/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Varies

Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 03/29/2016
Date Data Arrived at EDR: 04/06/2016
Date Made Active in Reports: 06/13/2016
Number of Days to Update: 68
Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 04/17/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/17/2017
Date Data Arrived at EDR: 01/18/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 112
Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 04/17/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/09/2017
Date Data Arrived at EDR: 03/10/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 54
Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Annually

City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 01/10/2017
Date Data Arrived at EDR: 01/13/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 110

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 04/10/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 03/03/2017
Date Data Arrived at EDR: 03/07/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 71

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

MARIN COUNTY:

Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 03/31/2017
Date Data Arrived at EDR: 04/06/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 27

Source: Public Works Department Waste Management
Telephone: 415-499-6647
Last EDR Contact: 03/31/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 02/22/2017
Date Data Arrived at EDR: 02/23/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 83

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

MONO COUNTY:

CUPA Facility List
CUPA Facility List

Date of Government Version: 02/21/2017
Date Data Arrived at EDR: 03/02/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 76

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Varies

MONTEREY COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 06/24/2016
Date Data Arrived at EDR: 06/27/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 43

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

NAPA COUNTY:

Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 03/15/2017
Date Data Arrived at EDR: 03/16/2017
Date Made Active in Reports: 05/09/2017
Number of Days to Update: 54

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 02/09/2017
Date Data Arrived at EDR: 02/10/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 96

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 05/01/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 02/06/2017
Date Data Arrived at EDR: 02/10/2017
Date Made Active in Reports: 04/21/2017
Number of Days to Update: 70

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/08/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 11/04/2016
Date Data Arrived at EDR: 11/11/2016
Date Made Active in Reports: 01/23/2017
Number of Days to Update: 73

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/08/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 02/06/2017
Date Data Arrived at EDR: 02/07/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 85
Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/09/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 09/02/2016
Date Data Arrived at EDR: 09/06/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 38
Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 01/31/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 111
Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 04/18/2017
Date Data Arrived at EDR: 04/20/2017
Date Made Active in Reports: 04/21/2017
Number of Days to Update: 1
Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/20/2017
Next Scheduled EDR Contact: 07/03/2017
Data Release Frequency: Quarterly

Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 01/19/2017
Date Data Arrived at EDR: 01/25/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 98
Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/20/2017
Next Scheduled EDR Contact: 07/03/2017
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 11/07/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 56

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/04/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Quarterly

Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 11/08/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 56

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/04/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 11/30/2016
Date Data Arrived at EDR: 02/09/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 105

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 12/09/2016
Date Data Arrived at EDR: 12/13/2016
Date Made Active in Reports: 03/03/2017
Number of Days to Update: 80

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 05/08/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 10/05/2016
Date Data Arrived at EDR: 12/06/2016
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 86

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 03/10/2017
Next Scheduled EDR Contact: 06/19/2017
Data Release Frequency: Quarterly

Solid Waste Facilities
San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2015
Date Data Arrived at EDR: 11/07/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 58
Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

Environmental Case Listing
The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24
Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 03/06/2017
Next Scheduled EDR Contact: 06/19/2017
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

Local Oversite Facilities
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10
Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Quarterly

Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 02/28/2017
Date Data Arrived at EDR: 03/02/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 62
Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 03/21/2017
Date Data Arrived at EDR: 03/23/2017
Date Made Active in Reports: 05/09/2017
Number of Days to Update: 47
Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 03/20/2017
Next Scheduled EDR Contact: 07/03/2017
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 02/21/2017
Date Data Arrived at EDR: 02/21/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 91
Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

SAN MATEO COUNTY:

Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 03/15/2017
Date Data Arrived at EDR: 04/07/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 33
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/09/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Annually

Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/15/2017
Date Data Arrived at EDR: 04/07/2017
Date Made Active in Reports: 04/21/2017
Number of Days to Update: 14
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/27/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28
Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

SANTA CLARA COUNTY:

Cupa Facility List
Cupa facility list

Date of Government Version: 02/22/2017
Date Data Arrived at EDR: 02/23/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 89
Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22
Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13
Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Annually

Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/07/2016
Date Data Arrived at EDR: 11/10/2016
Date Made Active in Reports: 01/24/2017
Number of Days to Update: 75

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 03/14/2017
Date Data Arrived at EDR: 03/17/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 67

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

SOLANO COUNTY:

Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 11/29/2016
Date Data Arrived at EDR: 12/21/2016
Date Made Active in Reports: 12/22/2016
Number of Days to Update: 1

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 03/09/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Quarterly

Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 03/15/2017
Date Data Arrived at EDR: 03/17/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 47

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 03/09/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Quarterly

SONOMA COUNTY:

Cupa Facility List
Cupa Facility list

Date of Government Version: 03/01/2017
Date Data Arrived at EDR: 03/30/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 54

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 03/27/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Varies

Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 01/04/2017
Date Data Arrived at EDR: 01/06/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 55

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 03/27/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 01/20/2017
Date Data Arrived at EDR: 01/24/2017
Date Made Active in Reports: 05/18/2017
Number of Days to Update: 114

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 11/30/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Varies

SUTTER COUNTY:

Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 12/02/2016
Date Data Arrived at EDR: 12/06/2016
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 35

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA Facility List

Cupa facilities

Date of Government Version: 01/05/2017
Date Data Arrived at EDR: 02/10/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 104

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 01/23/2017
Date Data Arrived at EDR: 01/25/2017
Date Made Active in Reports: 05/18/2017
Number of Days to Update: 113

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

TULARE COUNTY:

CUPA Facility List
Cupa program facilities

Date of Government Version: 01/05/2017
Date Data Arrived at EDR: 02/10/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 104

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 01/25/2017
Date Data Arrived at EDR: 01/27/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 34

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 12/27/2016
Date Data Arrived at EDR: 01/27/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 103

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/31/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 05/15/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Quarterly

Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 09/26/2016
Date Data Arrived at EDR: 10/27/2016
Date Made Active in Reports: 01/24/2017
Number of Days to Update: 89

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Quarterly

Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 02/27/2017
Date Data Arrived at EDR: 03/15/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 49
Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/15/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 03/31/2017
Date Data Arrived at EDR: 04/06/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 27
Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 03/31/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Annually

YUBA COUNTY:

CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 01/30/2017
Date Data Arrived at EDR: 01/31/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 112
Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 05/01/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45
Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/15/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 09/29/2016
Date Made Active in Reports: 01/03/2017
Number of Days to Update: 96
Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/11/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/30/2017
Date Data Arrived at EDR: 02/01/2017
Date Made Active in Reports: 02/13/2017
Number of Days to Update: 12

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 05/03/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Annually

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 07/22/2016
Date Made Active in Reports: 11/22/2016
Number of Days to Update: 123

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/18/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 06/19/2015
Date Made Active in Reports: 07/15/2015
Number of Days to Update: 26

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 04/14/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 50

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/13/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Annually

Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data

Source: PennWell Corporation

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.
Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.
Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.
Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish & Game
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

JOHN GILL ELEMENTARY SCHOOL
555 AVENUE DEL ORA
REDWOOD CITY, CA 94062

TARGET PROPERTY COORDINATES

Latitude (North):	37.47439 - 37° 28' 27.80''
Longitude (West):	122.240558 - 122° 14' 26.01''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	567152.2
UTM Y (Meters):	4147566.5
Elevation:	59 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5640620 PALO ALTO, CA
Version Date:	2012
Southwest Map:	5640628 WOODSIDE, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

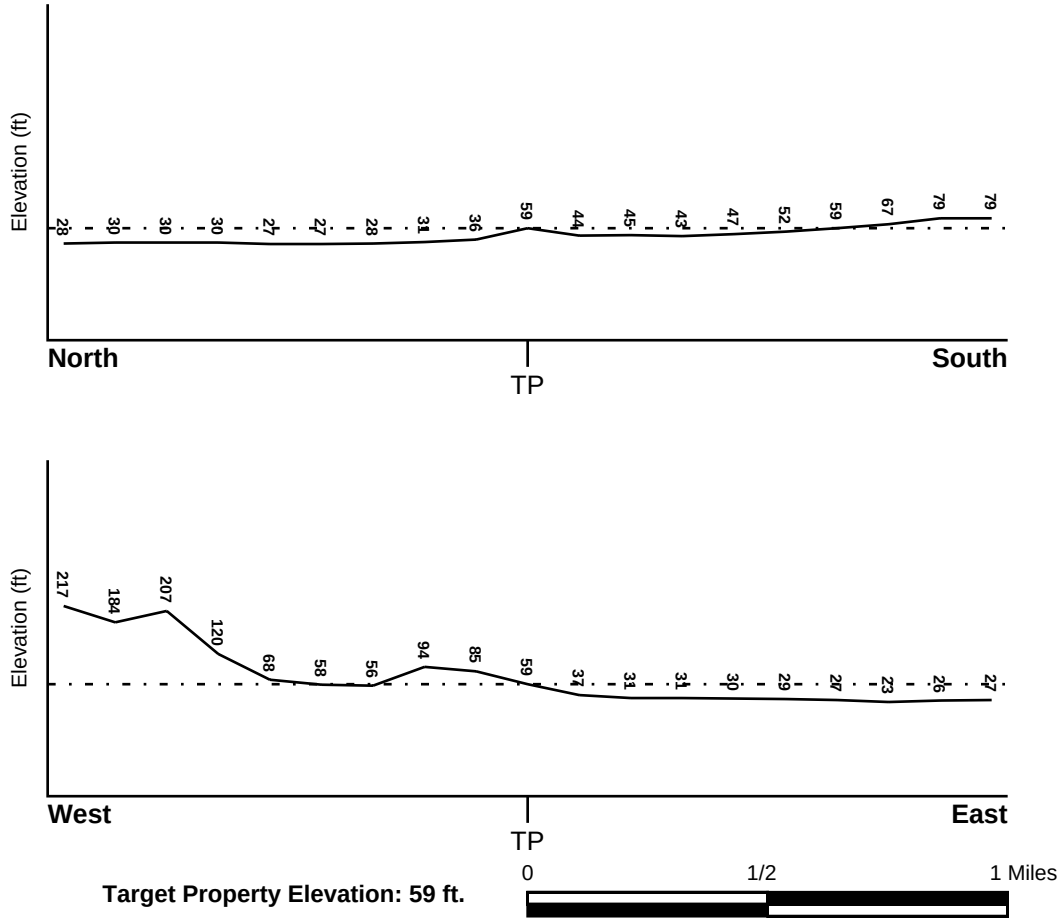
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General ENE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Target Property Elevation: 59 ft.

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06081C0301E	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06081C0282E	FEMA FIRM Flood data
06081C0285E	FEMA FIRM Flood data
06081C0303E	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
PALO ALTO	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
A1	1/4 - 1/2 Mile NNE	NNE
A2	1/2 - 1 Mile NNE	E
B3	1/2 - 1 Mile SE	NE
B4	1/2 - 1 Mile SE	N
5	1/2 - 1 Mile WNW	NE
C6	1/2 - 1 Mile NE	NE

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
D7	1/2 - 1 Mile NE	NNE
C8	1/2 - 1 Mile NE	NE
C9	1/2 - 1 Mile NE	N
D10	1/2 - 1 Mile NE	NE
11	1/2 - 1 Mile ENE	N
E12	1/2 - 1 Mile NE	N
13	1/2 - 1 Mile NNE	SE
14	1/2 - 1 Mile NNW	Not Reported
F15	1/2 - 1 Mile ENE	Not Reported
F16	1/2 - 1 Mile ENE	Not Reported
F17	1/2 - 1 Mile ENE	NE
F18	1/2 - 1 Mile ENE	NNE
E19	1/2 - 1 Mile NE	NE
E20	1/2 - 1 Mile NE	NE
G21	1/2 - 1 Mile NNE	E
G22	1/2 - 1 Mile NNE	NE
H23	1/2 - 1 Mile NE	NW
H24	1/2 - 1 Mile NE	NE
25	1/2 - 1 Mile NE	NE
27	1/2 - 1 Mile North	Varies

For additional site information, refer to Physical Setting Source Map Findings.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

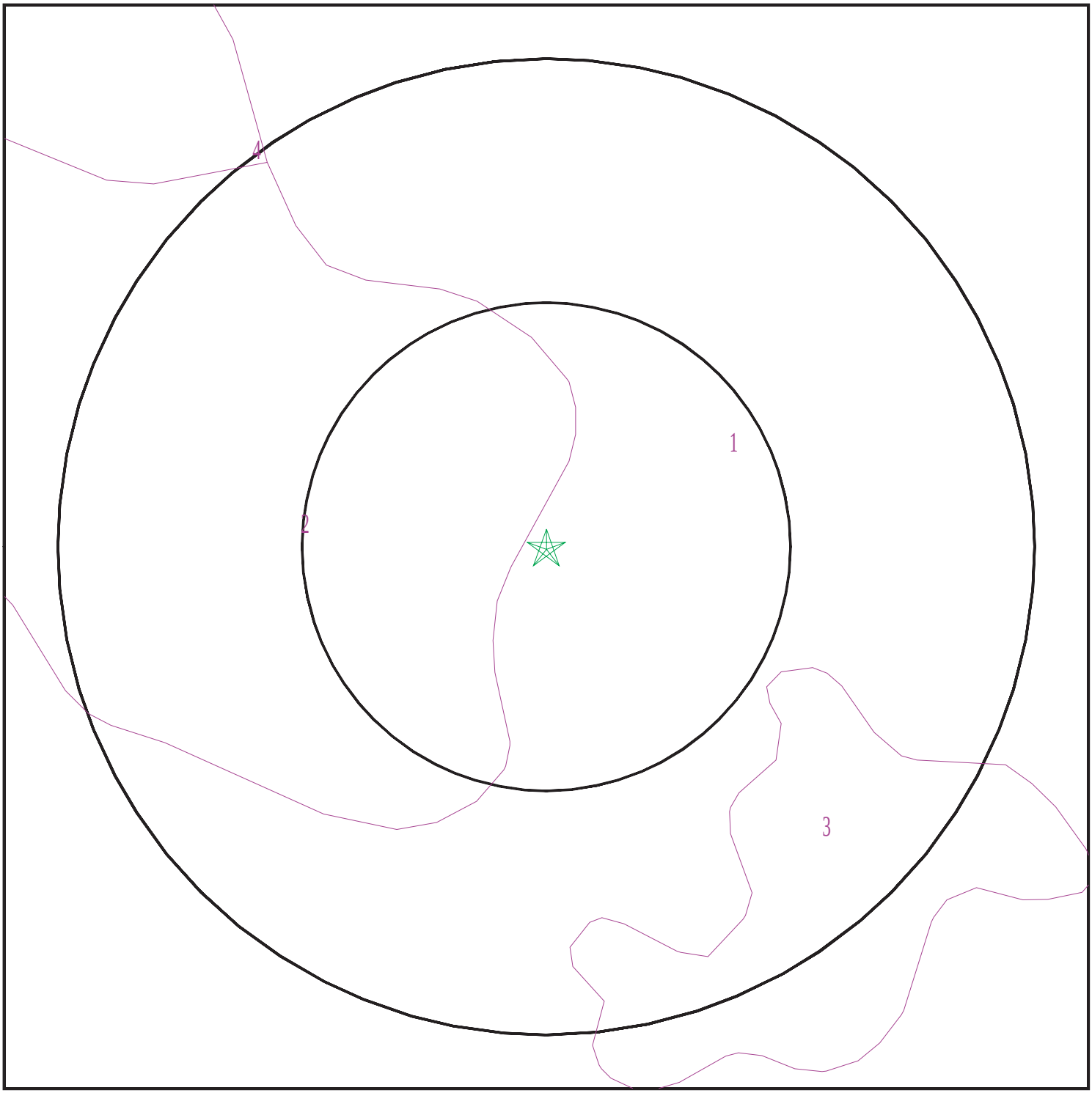
Era:	Paleozoic
System:	Permian
Series:	Ultramafic rocks
Code:	uM *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Plutonic and Intrusive Rocks

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4955887.16s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	John Gill Elementary School	CLIENT:	McCloskey Consultants Inc
ADDRESS:	555 Avenue Del Ora Redwood City CA 94062	CONTACT:	Tom Mccloskey
		INQUIRY #:	4955887.16s
LAT/LONG:	37.47439 / 122.240558	DATE:	June 05, 2017 10:14 am

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Urban land

Soil Surface Texture:
Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class:
Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches		Not reported	Not reported	Max: 0.01 Min: 0	Max: Min:

Soil Map ID: 2

Soil Component Name: Orthents

Soil Surface Texture:
Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	59 inches		Not reported	Not reported	Max: Min:	Max: Min:

Soil Map ID: 3

Soil Component Name: Orthents

Soil Surface Texture: variable

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	59 inches	variable	Not reported	Not reported	Max: Min:	Max: Min:

Soil Map ID: 4

Soil Component Name: Orthents

Soil Surface Texture:

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	59 inches		Not reported	Not reported	Max: Min:	Max: Min:

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 0.001 miles
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

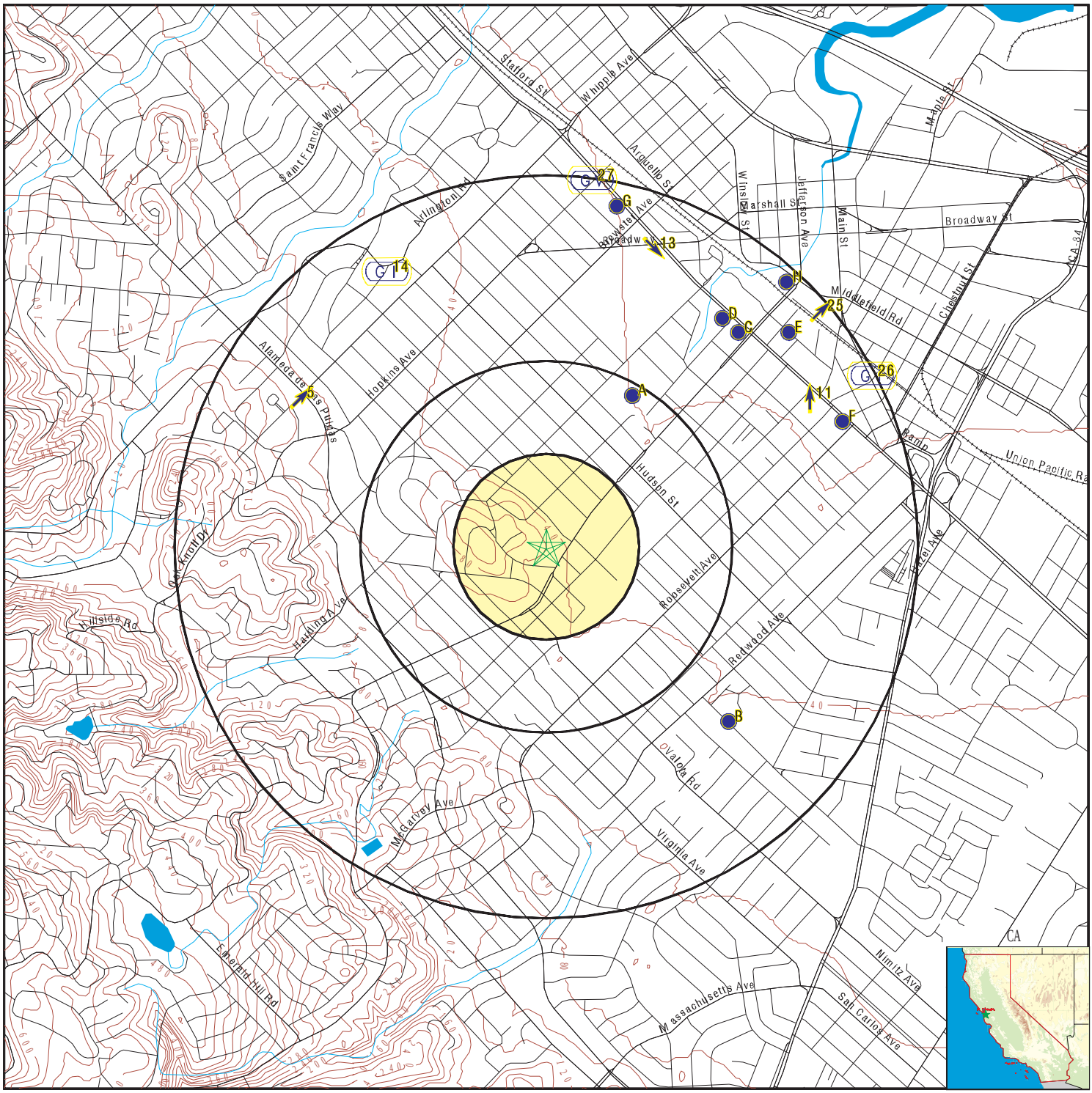
MAP ID	WELL ID	LOCATION FROM TP

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

PHYSICAL SETTING SOURCE MAP - 4955887.16s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME: John Gill Elementary School ADDRESS: 555 Avenue Del Ora Redwood City CA 94062 LAT/LONG: 37.47439 / 122.240558	CLIENT: McCloskey Consultants Inc CONTACT: Tom Mccloskey INQUIRY #: 4955887.16s DATE: June 05, 2017 10:14 am

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
A1 **NNE** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0441 NNE 4.70’ 8.90 Not Reported 03/01/1996	**AQUIFLOW**	**67069**
A2 **NNE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0478 E 1’ 3.5 Not Reported 10/30/1985	**AQUIFLOW**	**67049**
B3 **SE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0521 NE 19.5 24.0 Not Reported 06/05/1992	**AQUIFLOW**	**65874**
B4 **SE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	330024 N 13 15 Not Reported 03/11/1987	**AQUIFLOW**	**66746**
5 **WNW** **1/2 - 1 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0738 NE Not Reported Not Reported 16a 04/20/1993	**AQUIFLOW**	**65501**
C6 **NE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0839 NE 11 14 Not Reported 09/25/1996	**AQUIFLOW**	**65739**
D7 **NE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	330161 NNE 8’ 10’ Not Reported 02/04/1997	**AQUIFLOW**	**66559**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
C8 **NE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	330101 NE 7.37 9.45 Not Reported 06/1995	**AQUIFLOW**	**66727**
C9 **NE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0457 N 8.39 9.85 Not Reported 06/17/1994	**AQUIFLOW**	**66731**
D10 **NE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0185 NE 5.92 8.70 Not Reported 06/29/1992	**AQUIFLOW**	**66135**
11 **ENE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	330059 N Not Reported Not Reported 9.5 09/16/1988	**AQUIFLOW**	**66761**
E12 **NE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0393 N Not Reported Not Reported 11.30 06/19/1992	**AQUIFLOW**	**66566**
13 **NNE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0616 SE 7.00 8.70 Not Reported 05/20/1992	**AQUIFLOW**	**67077**
14 **NNW** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0362 Not Reported 21.5 29 Not Reported 06/01/1994	**AQUIFLOW**	**67086**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
F15 **ENE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	330023 Not Reported Not Reported Not Reported 7.22' 05/22/1990	**AQUIFLOW**	**66585**
F16 **ENE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	330023 Not Reported Not Reported Not Reported 7.22' 05/22/1990	**AQUIFLOW**	**66582**
F17 **ENE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0833 NE 8 9 Not Reported 05/17/1999	**AQUIFLOW**	**65591**
F18 **ENE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0724 NNE Not Reported Not Reported 7.8 a 05/1992	**AQUIFLOW**	**67018**
E19 **NE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	330082 NE 5.87 12 Not Reported 07/07/1997	**AQUIFLOW**	**65732**
E20 **NE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0707 NE 5.87 12 Not Reported 07/07/1997	**AQUIFLOW**	**65733**
G21 **NNE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0341 E 8.85 Not Reported 8.85 03/23/1991	**AQUIFLOW**	**67066**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
G22 **NNE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0454 NE 9.6 10.58 Not Reported 12/22/1992	**AQUIFLOW**	**67073**
H23 **NE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	330135 NW 6.52 7.33 Not Reported 12/1996	**AQUIFLOW**	**66052**
H24 **NE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	330152 NE Not Reported Not Reported 9.5 11/09/1998	**AQUIFLOW**	**67090**
25 **NE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0994 NE Not Reported Not Reported 10a 11/1996	**AQUIFLOW**	**65717**
26 **ENE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0920 Not Reported Not Reported Not Reported 10'a 03/31/1994	**AQUIFLOW**	**66743**
27 **North** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0407 Varies 8.5 12.3 Not Reported 08/1990	**AQUIFLOW**	**65983**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
94062	119	27

Federal EPA Radon Zone for SAN MATEO County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 94062

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	2.000 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish & Game
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779
Oil and Gas well locations in the state.

RADON

State Database: CA Radon
Source: Department of Health Services
Telephone: 916-324-2208
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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Appendix H
Phase I Environmental Site Assessment

Phase I Environmental Site Assessment

John Gill School

555 Avenue Del Ora
Redwood City, San Mateo County, CA 94062

Prepared for:

Redwood City School District
Redwood City, California

August 3, 2017

Prepared by:

McCloskey Consultants, Inc.



PHASE I ENVIRONMENTAL SITE ASSESSMENT

John Gill School

555 Avenue Del Ora
Redwood City, San Mateo County, CA 94062

August 3, 2017

Prepared for:

Redwood City School District

Prepared by:

McCloskey Consultants, Inc.

420 Sycamore Valley Road West

Danville, CA 94526

Belinda P. Blackie, P.E.
Senior Project Engineer

Thomas F. McCloskey, P.G., C.E.G., C.Hg.
Principal Geologist

EXECUTIVE SUMMARY

The Redwood City School District (RCSD) retained McCloskey Consultants, Inc. to perform a Phase I Environmental Site Assessment (ESA) for the renovation/redevelopment Site on the 6.90-acre (300,564-square-foot) John Gill School. The school is located at 555 Avenue Del Ora, in Redwood City, San Mateo County, California. The purpose of this assessment was to identify Recognized Environmental Conditions (RECs) associated with the property as defined by ASTM E 1527-13, Standard Practice for Environmental Site Assessments.

The initial John Gill School buildings on the Site, the existing classroom structures, were constructed in 1947. Through at least 1968, the original classroom buildings and two very small structures along the Avenue Del Ora property frontage were the only structures on the Site, the remainder of which was undeveloped. The portable class and art room structure was constructed on the Site in 1953 and the elevator building was added in 2000. Currently, the Site is developed with facilities of John Gill School, including classrooms, a portable class and art room structure, an elevator building, and associated landscaping and asphalt- and concrete-paved play, parking, and driveway areas and stairways. Very small quantities of janitorial and maintenance materials were observed within a small on-Site storage room, which historically housed a natural gas-fired boiler.

This ESA has revealed evidence of the following Recognized Environmental Condition (REC) in connection with the Site.

- The presence of aged and historical structures on the Site, resulting in the potential presence of pesticides and/or herbicides from application around building perimeters and lead from flaking lead-based paint (LBP).

Although not considered RECs, the following concerns/recommendations also are identified.

- Naturally-occurring asbestos (NOA) may be present in Site soil based on the location within 10 miles of ultramafic rock.
- Based on the date of construction on the Site, Pacific Gas and Electric Company (PG&E) should be contacted to determine the polychlorinated biphenyl (PCB) status of an electrical transformer.
- Following removal of the sub-grade hydraulic elevator equipment, the underlying and surrounding soil should be visually observed for indications of hydraulic fluid releases. If impacted soil is noted, appropriate sampling, handling, and disposal is required.
- Prior to the proposed renovation/redevelopment project, appropriate asbestos-containing materials (ACM) and LBP surveys are required to be conducted and identified materials abated/appropriately managed.

ASSESSMENT FINDINGS MATRIX

Site Name: John Gill School
Site Address: 555 Avenue Del Ora, Redwood City, San Mateo County, California
Site APN: 058-161-390
Site Development Type: School

Issue	Located?	Text Section (s)	Comments
Hazardous Materials and/or Hazardous Wastes	No	2.3	Only small quantities of typical janitorial and maintenance materials stored in a storage room.
55-Gallon Drums	Yes	2.3	Used to contain water pumped from an elevator sump; several inches of water observed within drum.
Aboveground Storage Tanks	No		
Underground Storage Tanks	No		
Monitoring Wells	No		
Production Wells	No		
Visual Evidence of Hazardous Materials Release	No		
Transformers	Yes	2.3 & 6.6	PG&E pad-mounted electrical transformer adjoining driveway along Avenue Del Ora.
Impact to On-Site Soil and/or Ground Water	No		
Off-Site Contamination of Potential Concern to Site	No		
Soil Vapor Intrusion Concerns	No		
Potential for Elevated Radon	Low	6.7	
Potential for Lead-Based Paint	Yes	8.2 & 8.4	Based on age of some structures, lead-based paint could be present.
Potential for Asbestos-Containing Building Materials	Yes	8.4	Based on age of some structures, asbestos-containing materials could be present.
Undocumented Fill	No		
Historical or Current Use of Site for:			
Dry Cleaner	No		
Gas Station	No		
Industrial/Manufacturing	No		
Auto Maintenance/Repair	No		
Landfill/Dump	No		
Additional Concerns	No		

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1.0 INTRODUCTION

1.1 Statement of Purpose

McCloskey Consultants, Inc. (MCI) was retained by the Redwood City School District (RCSD) to perform a Phase I Environmental Site Assessment (ESA) for portions of John Gill School, located at 555 Avenue Del Oro in Redwood City, California (Figure 1). Based on information provided by the RCSD, renovation/redevelopment of the southwestern portion of the school for continued school use is planned (Site)(Figure 2).

The purpose of this study was to identify Recognized Environmental Conditions (RECs) associated with the property in accordance with the scope and limitations of the American Society of Testing and Materials (ASTM) E 1527-13, "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. Exceptions to the ASTM E 1527-13 scope were limited to those deviations described in Sections 9.0 and 10.0. The scope of investigative activities and initial findings are summarized in the following sections.

This ESA has been prepared by MCI for the sole use of the RCSD (User); the ESA is valid for six months in accordance with ASTM guidelines.

1.2 Scope of Assessment

This ESA consisted of the following tasks:

- Performance of a Site reconnaissance;
- Review of historical Site uses and conditions;
- Review of environmental databases and other information;
- Interview of a representative of the Site owner/operator; and,
- Preparation of a report summarizing the findings, conclusions and recommendations.

2.0 SITE DESCRIPTION

2.1 Site Location

The Site consists of the southwestern portion of John Gill School, located at 555 Avenue Del Ora in Redwood City, California. Redwood City is located in the eastern portion of San Mateo County, along the western margin of the San Francisco Bay (Figures 1 and 2). The Site consists of an irregularly-shaped parcel of land designated as assessor's parcel number (APN) 058-161-390 by the San Mateo County Assessor's Office (SMCAO). John Gill School, including the Site, is approximately 6.90 acres (300,564 square feet) in size.

2.2 Site Vicinity and General Characteristics

The Site vicinity, in addition to portions of the school not included as the Site, is primarily residential. Non-Site portions of John Gill School border the Site to the north and east. The entire school, including the Site, is bordered by Myrtle Street followed by residential properties and a fire station to the north, Avenue Del Ora followed by residential properties to the south, residential properties to the west, and Jefferson Avenue followed by residential properties to the east.

Site topography slopes moderately towards the east and northeast, with a Site elevation averaging approximately 60 feet above mean sea level. The vicinity topography slopes more gently towards the northeast. The Site boundaries generally are undelineated, and were documented in the field by the RCSD representatives and provided development plans.

2.3 Current Uses and Physical Description of the Site

A reconnaissance of the Site was conducted by Ms. Belinda Blackie of MCI on June 16, 2017. Ms. Blackie was accompanied at the time of her reconnaissance by RCSD representatives Mr. Donald Dias and Mr. Olakunle Gbadamost. Only portions of the Site to be impacted by redevelopment/modifications were observed; no significant Site access limitations were encountered.

The Site included two permanent classroom buildings connected by a covered breezeway, a portable class and art room structure, an elevator building, and associated landscaping and asphalt- and concrete-paved play, parking, and driveway areas and stairways. A storage room was included in one of the permanent classroom buildings, and was observed to house shelving units with multiple 1-gallon containers of assorted janitorial materials and paints. A small flammable materials storage cabinet housing a 1-gallon container of gasoline also was observed within the storage room. According to Mr. Dias, a natural gas boiler previously was located within the storage room, and removed doing a 1998 modernization project. A hydroelectric elevator was located within a structure to the east of the classroom buildings that provides access to the upper level facilities from the lower level (due to the moderate topographic slope), the hydroelectric elevator was installed in 2000. Observation of the elevator motor did not reveal evidence of leaks or releases. One 55-gallon plastic drum was observed adjoining the elevator, reportedly utilized to collect water pumped from the elevator sump. Several inches of water were observed within the drum.

Landscaping and asphalt- and concrete-paved areas were observed on other portions of the Site slated for renovation/redevelopment. A PG&E pad-mounted transformer (T-5348) was located adjoining the eastern side of the school entrance driveway off Avenue Del Ora.

A summary of Site features is presented in Table 1. Site photos are included in Appendix A.

Table 1. Summary of Site Features

Feature	Observed	Not Observed	Comments
Above-ground storage tanks		✓	
Agricultural/Irrigation wells		✓	
Domestic wells		✓	
Drains or sumps		✓	
Drums	✓		Utilized to contain groundwater pumped from elevator sump.
Hazardous substances and/or petroleum products		✓	With the exception of multiple 1-gallon containers of assorted janitorial materials and paints observed within the storage room.
Odors		✓	
Pits, ponds or lagoons		✓	
Pools of liquid		✓	
Septic system		✓	
Solid waste		✓	
Stained or corroded soil and/or Pavement		✓	
Stressed vegetation		✓	Other than stress due to lack of irrigation.
Transformers	✓		PG&E pad-mounted electrical transformer along Avenue Del Ora south of entrance driveway.
Underground storage tanks		✓	
Wastewater		✓	

2.4 Current Uses of the Adjoining Properties

The Site is located in a primarily residential area of Redwood City. Non-Site portions of John Gill School border the Site to the north and east. Adjoining north of the school was Myrtle Street, followed by Redwood City Fire Station 10 (2190 Jefferson Avenue) and single-family residences. Avenue Del Ora adjoins the school along the southern boundary, followed by single-family residences; single-family residences also adjoin the school to the west. Jefferson Avenue, followed by single-family residences, adjoins the school to the east.

Also present beneath the ground south of the Site are three 5-foot diameter Hetch-Hetchy water pipelines operated by the San Francisco Public Utilities Commission (SFPUC). The pipelines reportedly are located within a 60-foot wide easement extending from the southwestern corner of the Avenue Del Ora/South Place intersection beneath Avenue Del Ora and the adjoining John Gill School parking lot to the east of this easement.

3.0 USER- AND OWNER-PROVIDED INFORMATION

As part of this study, Mr. Donald Dias of the RCSD, the User of the Phase I report and property owner, was provided with an environmental questionnaire regarding the Site. The environmental questionnaire is used to obtain current and historical information relating to the Site. The questionnaire was completed by Mr. Dias on June 20, 2017; a copy is included in Appendix B. Mr. Dias and RCSD project manager Mr. Olakunle Gbadamost also were interviewed at the time of the Site reconnaissance. Information obtained through the questionnaire and interviews is summarized below, with further detail included in the appropriate sections of this report.

Based on information provided by Mr. Dias and Mr. Gbadamost, the original school building was constructed for Eagle Hill School in 1931; this building is not part of the Site. The earliest Site school structures, the classroom buildings, were constructed in 1947 for John Gill School. Additional Site buildings were constructed in 1968 (portable class and art room structure) and 2000 (elevator building). The school has been occupied continuously by schools since construction, originally by Eagle Hill School (also a RCSD school) and subsequently by John Gill School. A boys' school may have been located on the Site prior to construction of Eagle Hill/John Gill School. Mr. Dias stated that no hazardous materials are stored off-Site on the Site, but that custodial cleaning, periodic weed control, periodic broad leaf control, and fertilizer materials occasionally are used. Chemical waste (such as paint) reportedly is stored at the RCSD corporation yard prior to disposal by a licensed transporter. Following cleaning, "custodial green" cleaners, such as Suprox and hydrogen peroxide, are disposed to the sanitary sewer. He was unaware of the presence of any USTs.

AHERA asbestos surveys reportedly are completed at the Site every three years. During abatement projects for ACM and LBP, ACM debris is stored in a shipping container placed at the school, and LBP debris is placed in a 55-gallon drum. These containers are hauled from the school for disposal following completion of the projects.

Mr. Dias stated that the two permanent classroom buildings and the portable building will be demolished, as well the existing elevator building. A new two-story classroom building will be constructed in place of the existing buildings. Additionally, a new lunch shelter will be

constructed east of the existing elevator building. The driveway entrance to the school from Avenue Del Ora will be reconfigured and the parking spaces relocated.

Mr. Dias was not aware of any indications of contamination on the Site, and reported no knowledge of environmental cleanup liens, activity and land use limitations, or pending, threatened or past litigation or administrative proceedings related to hazardous substances or petroleum products at the Site. He also reported no receipt of notices from governmental entities regarding possible violation of environmental laws or liability related to the same.

4.0 PAST SITE OWNER/OCCUPANT INTERVIEWS

Contact information for past Site owner(s)/occupant(s) was unavailable, and therefore interviews were unable to be conducted.

5.0 REVIEW OF PREVIOUSLY-PREPARED ENVIRONMENTAL DOCUMENTS

No previously-prepared environmental documents for the Site were available for MCI's review.

6.0 RECORDS REVIEW

6.1 Hydrogeology

The town of Redwood City is located in the eastern portion of San Mateo County, along the western margin of the San Francisco Bay. San Mateo County is located in the Coast Ranges geomorphic province, which is characterized by northwest-trending mountain ranges and valleys subparallel to the San Andreas Fault. Soils in the vicinity of the Site are categorized by the USDA Soil Conservation Service as Orthents and Urban Land. Orthents soils are moderately-well and well-drained, variable soils with moderately coarse textures and moderate infiltration rates. Urban Land soils are partially hydric, clayey soils with a high water table or located shallow to an impervious layer, and having very slow infiltration rates (EDR 2017).

The Site is located within the Santa Clara Valley Groundwater Basin, San Mateo Plain Subbasin. The aquifer system in the subbasin consists of the Santa Clara Formation and Quaternary-age alluvial deposits. The Santa Clara Formation is comprised of Plio-Pleistocene-age materials. The Quaternary alluvium is the most significant water-bearing formation in the Subbasin.

Based on vicinity hydrogeological information obtained from the State Water Resources Control Board (SWRCB) Geotracker database, first groundwater is encountered at a depth of

approximately 11 to 14 feet beneath ground surface. The groundwater flow direction is anticipated to follow the local topographic slope towards the northeast.

6.2 Environmental Record Database Review

Various Federal and State regulations require that government agencies maintain records of environmental permits, records of properties generating, handling or storing hazardous materials, records of properties impacted by regulated compounds, and records of properties under investigation by the government for alleged violations of hazardous material regulations. Environmental Data Resources, Inc. (EDR), a specialized research firm, was contracted to provide an electronic search of these databases, meeting the minimum search distances as outlined in ASTM E1527-13. A listing of the databases searched and the dates the database information last was updated are provided in the EDR Radius Map report included in Appendix C.

6.2.1 Site Records

The Site was listed on four of the regulatory agency databases including Haznet, RCRA Small Quantity Generator (SQG), FINDS and ECHO. The FINDS and ECHO databases are indicator databases for inclusion of the Site on the Haznet and SQG databases and contain no significant information.

The Haznet database, a record of facilities which submitted manifests for disposal of hazardous waste, documented disposal of 10.11 tons asbestos-containing waste in 1997, 2.53 tons asbestos-containing waste in 1998, 0.08 ton other organic solids in 2004, and 0.21 ton asbestos-containing waste in 2006.

The SQG listing indicated the RCSD, at the school address, submitted registration as a small quantity generator of hazardous waste (between 100 and 1,000 kg/month generated) in 1996. The database listing also indicated the school submitted registration as a large quantity generator of hazardous waste (greater than 1,000 kg/month generated) in 1985. No generator violations were documented. Based on information obtained from the RCSD, the school applied for the generator designations for disposal of building materials during previous renovations.

6.2.2 Vicinity Facility Records

Listings for off-Site facilities in the EDR report, including those identified as “orphan” facilities unable to be plotted due to incorrect or insufficient address information, were reviewed for their potential to impact the Site.

The only release documented in the groundwater up-gradient direction from the Site in the EDR report is Jefferson Chevron at 3139 Jefferson Avenue, is located more than 1/3 mile from the Site. Based on information available on the Geotracker database, Jefferson Chevron does not have significant contaminant concentrations migrating beyond the property perimeter and therefore it is not of environmental concern to the Site. Based on the location and/or release information for the other listed facilities, none appeared to be of significant concern.

6.3 Soil Vapor Intrusion Evaluation

As part of this study, a Tier 1 screening assessment of the potential for vapor encroachment conditions (VECs) to exist at the Site was conducted in general accordance with ASTM E-2600-10. The Site, adjoining properties, and properties located up-gradient from the Site, with respect to anticipated groundwater flow, were evaluated for the potential to create a VEC at the Site. Using information from the EDR electronic database search report previously referenced in Section 7.2, releases (if reported) were evaluated based on the type of chemical and the distance to the Site. If a petroleum hydrocarbon plume was reported within 1/10 mile of the Site, or a volatile organic hydrocarbon (non-petroleum hydrocarbon) plume was reported within 1/3 mile of the Site, in a hydraulically up-gradient direction, it was presumed a VEC could exist at the Site and additional screening may be warranted. Criteria regarding the distance and direction of a potential release facility from the Site may be modified based on professional judgment. Recommendations for additional screening are based on criteria including Site use/proposed Site use, type of Site structure, physical setting, depth to groundwater, soil type, and presence of natural and/or man-made conduits.

Based on evaluation of the above criteria, the potential for a VEC to exist at the Site appears very low. No significant petroleum hydrocarbon releases were reported within 1/10 mile or volatile organic hydrocarbon releases were reported within 1/3 mile in a hydraulically up-gradient direction from the Site. Additional screening is not recommended at this time.

6.4 Local Regulatory Agency Record Sources

On June 9, 2017, MCI requested available hazardous materials files and documents related to the presence or absence of environmental conditions and activities on the Site available from the San Mateo County Environmental Health Department (SMCEHD). According to the SMCEHD representative, there are no files for the subject property.

6.5 On-Line State Regulatory Agency Record Sources

In addition to requesting files available at the local regulatory agencies, the on-line SWRCB Geotracker database and the California Department of Toxic Substances Control (DTSC)

Envirostor database were reviewed on June 18, 2017. The Site was not included on either database.

6.6 Potable Water Source, Power Source, and Method of Sewage Disposal

Municipal potable water for the Site is provided by the City of Redwood City, utilizing water provided by the SFPUC, supplemented with water from the Alameda and Peninsula Watersheds. Sewage disposal services also are provided to the Site by the City of Redwood City.

Electricity and natural gas are provided to the property by PG&E. Overhead power lines were observed along Avenue Del Ora, Jefferson Avenue, Myrtle Avenue, and Harrison Avenue, bordering the boundaries of John Gill School; only those along the southern side of Avenue Del Ora were proximate to the Site. One pad-mounted transformer (T-5348) was observed at the Site, adjoining east of the entrance driveway on Avenue Del Ora.

6.7 State and Federal Radon Testing Data

Federal and State radon screening test data for the Site zip code of 94062 were included in the EDR radius map report previously referenced in Section 6.2 and included in Appendix C. Based on information provided in the regulatory agency database report, two Federal and 119 State radon screening tests have been performed within the Site zip code. The Federal radon screening tests of the 1st floor living area reported average radon activity at 2.000 pCi/l, with both radon test results beneath the USEPA recommended action level of 4 pCi/l. No Federal radon screening tests of the basement level were reported. Twenty seven of the 119 State tests (23%) reported radon exceeding the 4 pCi/l action level. San Mateo County is reported in Federal EPA Radon Zone 2, with average indoor radon levels between 2 and 4 pCi/l. Based on the test data, there is a low probability of radon exceeding the action level.

6.8 Public, State, and Federal Well Data

Federal, State and public well location data was obtained from EDR in the report included in Appendix C. Review of the Federal, State, and public well database information did not indicate the presence of wells on the Site. The SMCEHD had no documentation of groundwater monitoring wells on the Site.

6.9 Oil and Natural Gas Wells

Visual observation of the Site and vicinity was conducted, as was review of Department of Oil, Gas and Geothermal Resources (DOGGR) maps available on the DOGGR website. No gas wells

or dry holes were reported on the Site. No gas wells or dry holes were observed or reported on the Site.

6.10 Naturally-Occurring Asbestos

The California Department of Conservation General Location Guide for Ultramafic Rocks in California was reviewed to evaluate the presence of potential naturally-occurring asbestos (NOA) in the immediate vicinity of the Site. The nearest outcrop of Ultramafic rock that could contain NOA is documented approximately 2 miles to the west-southwest (Department of Conservation, 2000) which is the 10-mile radius established by the DTSC for potential NOA concerns for K-12 schools in California.

7.0 HISTORICAL REVIEW

7.1 Topographic Maps and Aerial Photographs

A review of historical information was performed to identify past uses of the Site and adjacent properties that may pose an environmental concern. The following historical sources were reviewed:

- Aerial photographs from the years 1943, 1948, 1956, 1958, 1963, 1968, 1974, 1982, 1991, 1998, 2005, 2009, 2010 and 2012 obtained from EDR, Inc. on June 5, 2017;
- USGS 7.5- and 15-minute topographic maps from the years 1897, 1899, 1902, 1943, 1948, 1953, 1961, 1968, 1973, 1982, 1991 and 1997 reviewed on-line through the USGS Historical Topographic Map Explorer website on June 18, 2017; and
- Sanborn Fire Insurance Company maps from the years 1950, 1962 and 1968, obtained from EDR, Inc. on June 5, 2017.

Copies of the aerial photographs and Sanborn maps are included in Appendix D.

The following observations were made from the available sources.

7.1.1 Site Observations

1897 - 1902: No development was depicted on the Site on the topographic maps from this time period.

1943: The aerial photograph resolution was poor, making Site details difficult to discern. The Site appeared largely undeveloped. A driveway to a single off-Site school building entered the Site from Avenue Del Ora at the southwestern corner of the Site. What possibly were one to two small structures appeared present along the Avenue Del Ora frontage as well. A square-shaped outline was visible in the location of the existing permanent classroom buildings. What appeared to be the Hetch-Hetchy easement was visible in the existing location along the southern Site boundary. A school was depicted on/near the Site on the 1943 topographic map.

1948: The existing permanent classroom buildings and parking lot were present on the Site. A small structure was located adjoining east of the entrance driveway, along the Avenue Del Ora frontage. The remainder of the Site remained undeveloped. The school remained depicted on/near the Site on the 1948 topographic map.

1950: The map depicted the two existing permanent classroom buildings as well as a small structure labeled as a garage along the southern Site boundary (fronting Avenue Del Ora; likely one of the structures visible on earlier aerial photographs). The school was named Eagle Hill School at the time. No development was depicted on the remainder of the Site.

1953: The two existing permanent classroom buildings were depicted on the Site on the 1953 map, labeled as John Gill School.

1956 & 1958: There were no significant changes from the 1948 aerial photograph.

1961: There were no significant changes from the 1953 topographic map.

1962: There were no significant changes from the 1950 Sanborn map, except the school name had been changed to John Gill School.

1963: There were no significant changes from the 1958 aerial photograph, with the exception of rows of small, uniform objects located northeast of one of the permanent classroom buildings (possibly lunch tables).

1968: There were no significant changes from the 1968 Sanborn map, aerial photograph, or topographic map.

1973: There were no significant changes from the 1968 topographic map.

1974: The previous garage no longer was present and the existing portable class/art room structure had been constructed south of the permanent classroom buildings.

1982: There were no significant changes from the 1974 aerial photograph. The Site was depicted within a shaded area, indicating urban development, on the 1982 topographic map.

1991: A smaller building was visible adjoining east of the portable class/art room structure on the 1991 photograph. The 1991 topographic map depicted the Site within an area of urban development.

1997: The 1997 topographic map depicted the Site within an area of urban development.

1998: There were no significant changes from the 1991 aerial photograph.

2005 to 2012: The Site appeared generally similar to the current development, including addition of the elevator building and existing pavements and landscaping.

7.1.2 Site Vicinity/Adjoining Property Observations

1897 - 1902: The Site vicinity largely was undeveloped, with two roads and very few small structures on non-adjoining properties.

1943: The original Eagle Hill School building was visible on the school property adjoining north of the Site on the 1943 photograph; school property adjoining east remained undeveloped. Undeveloped land adjoined the Site to the west and residential structures adjoined the Site to the south. What appeared to be the Hetch-Hetchy easement was visible in the existing location south, southwest and southeast of the Site. The majority of the vicinity appeared residentially developed. The Site vicinity was depicted as a shaded area, indicating urban development, on the 1943 topographic map; a school was indicated on the larger John Gill School property.

1948: Additional school facilities were visible on the school property adjoining north and east of the Site on the 1948 aerial photograph. What appeared to be a few residences were visible on properties adjoining west, and residences remained visible on properties adjoining south of Avenue Del Ora. The majority of the vicinity remained residentially developed. The 1948 topographic map depicted no significant changes from the 1943 map.

1950: The original Eagle Hill School building, as well as a second smaller classroom building, were depicted on the school property adjoining north of the Site on the 1950 Sanborn map. School property adjoining east was undeveloped. Dwellings adjoined the Site to the west and to the east across Avenue Del Ora. An undeveloped strip in the location of the Hetch-Hetchy easement was depicted west of the South Place/Avenue Del Ora intersection. The majority of the vicinity remained residentially developed.

1953: There were no significant changes from the 1948 topographic map, with the exception of two school structures depicted on the larger John Gill school property north of the Site and the depiction of a community park a short distance southeast of the Site.

1956 & 1958: Additional school facilities were visible on the school property adjoining north of the Site on the 1956 aerial photograph. An increase in residential development was noted adjoining west of the Site. The remainder of the adjoining properties and larger vicinity were densely residentially developed, with a park appearing present a short distance southeast of the Site on the 1958 photograph.

1961: There were no significant changes from the 1953 topographic map, with the exception of the existing fire station a short distance northeast.

1962: There were no significant changes from the 1950 Sanborn map, with the exception of the addition of two classroom buildings on the school property adjoining north of the Site.

1963: There were no significant changes from the 1958 aerial photograph.

1968: There were no significant changes from the 1962 Sanborn map and 1961 topographic map.

1973: There were no significant changes from the 1968 topographic map.

1974: There were no significant changes from the 1968 Sanborn map, with the exception of increased development on the park property a short distance southeast.

1982 - 2012: The Site vicinity appeared generally similar to that currently present.

7.2 Building Department Records

Building department records from the City of Redwood City were reviewed on-line on June 22, 2017. A 2002 permit was issued for removal and replacement of the driveway. No other significant permits were available.

7.3 Client-Provided Documentation

Based on Site history information provided by the RCSD, the two permanent classroom structures were constructed on the Site in 1947 for John Gill School. The portable class and art room structure was added in 1968 and the elevator building was added in 2000.

8.0 FINDINGS, OPINIONS AND RECOMMENDATIONS

This ESA of the John Gill School Site located at 555 Avenue Del Ora in Redwood City, California has been performed in conformance with the scope and limitations of ASTM Practice E 1527-13. Any exceptions to, or Deletions from, this practice are described in Sections 9.0 and 10.0 of this report.

This ESA has revealed evidence of the following REC in connection with the Site: the presence of aged and historical structures on the Site, resulting in the potential presence of pesticides and/or herbicides from application around building perimeters and lead from flaking LBP.

Results of the research performed for this study are summarized in the following sections.

8.1 Site Use

8.1.1 Current

The Site currently is occupied by facilities of John Gill School, including two permanent classroom buildings connected by a covered breezeway, a portable class and art room structure, an elevator building, and associated landscaping and asphalt and concrete-paved play, parking, and driveway areas and stairways.

8.1.2 Historical

The initial John Gill School buildings on the Site were constructed in 1947. Through the mid- to late-1960s, the original classroom buildings and two very small structures along the Avenue Del Ora property frontage were the only structures on the Site, the remainder of which was undeveloped. The portable class and art room structure was constructed on the Site in 1968 and the elevator building was added in 2000.

8.2 Aged Structures

Several of the structures on the Site have been present since the 1940s and 1960s. Additionally, one to two small structures were documented along the Avenue Del Ora frontage of the Site during the 1940s, with one possibly remaining until the 1970s. Based on the dates of construction, the paint on the aged/historical structures may contain lead. Flaking LBP may have impacted limited areas of exposed soil along the southern wall of the portable class and art room building, and in the location of the historical structures. Additionally, application of pesticides and/or herbicides may have occurred around the building perimeters, and these are considered REC's for the Site. Evaluation of exposed near-surface soil around the structure perimeters for the presence of pesticides and herbicide-related metals, as well as lead, is recommended.

8.3 NOA

Based on the presence of ultramafic rock outcrops identified approximately 2 miles from the Site, NOA may be present in on-Site soil. Evaluation of asbestos in Site soils is recommended.

8.4 Asbestos-Containing Building Materials and Lead-Based Paint

Based on the dates of construction for the permanent classroom and portable class and art room structures, building materials and coatings may include ACM and LBP. The RCSD reportedly conducts AHERA asbestos surveys of the buildings every three years. Additionally, disposal of significant quantities of asbestos-containing building materials were documented as having been disposed previously. Prior to the proposed renovation/redevelopment project however, appropriate ACM and LBP surveys must be conducted and identified materials abated/appropriately managed.

8.5 Elevator

The hydraulic elevator at the Site is planned for removal during the renovation/redevelopment project. Following removal of the sub-grade hydraulic equipment, the underlying and surrounding soil should be visually observed for indications of hydraulic fluid releases. If significantly impacted soil is noted, appropriate sampling, handling, and disposal is required.

8.6 Transformers

Due to the age of the Site development, the pad-mounted electrical transformer along Avenue Del Ora east of the school entrance driveway could contain PCBs. No indication of releases from the transformer was observed, however we recommend that PG&E be contacted to ascertain the PCB status of the unit.

8.7 Radon

Twenty three percent of the State radon tests conducted within the Site zip code documented radon exceeding the 4 pCi/l action level though San Mateo County is reported in Federal EPA Radon Zone 2, with average indoor radon levels between 2 and 4 pCi/l. Based on this there is a low probability of radon exceeding the action level.

8.8 Undocumented USTs

Based on the date of construction for the building housing the former boiler, as well as the size and location of the former boiler room, it appears unlikely that a historical fuel oil-fired boiler

would have been present. Consequently, it appears unlikely that an undocumented fuel oil UST would remain present in the vicinity of the former boiler.

8.9 Concerns with Vicinity Properties

Information contained in the database search report did not reveal the presence of vicinity properties appearing likely to have significantly impacted the Site through documented releases to soil and/or groundwater.

8.10 Soil Vapor Intrusion

The potential for a VEC to exist at the Site appears very low. No significant petroleum hydrocarbon releases were reported within 1/10 mile or volatile organic hydrocarbon releases were reported within 1/3 mile in a hydraulically up-gradient direction from the Site. Additional screening is not recommended at this time.

9.0 DEVIATIONS

The following deviations to ASTM Practice E1527-13 occurred due to data gaps, as summarized below.

Data gaps result from insufficient information availability for the Site, which may hinder the ability of the study to adequately distinguish recognized environmental concerns. The following data gaps were encountered.

- Historical sources available included gaps of greater than 5 years; additional sources were not reasonably ascertainable. Based on the development type and consistency however, this data gap is not considered significant.

10.0 ADDITIONS

The following additions to ASTM Practice E1527-13 were made:

- Radon data for the Site vicinity was reviewed;
- NOA location information for the Site vicinity was reviewed;
- State and Federal well data for the Site and vicinity were reviewed; and,
- Department of Oil and Gas maps for the Site and vicinity were reviewed.

11.0 REFERENCES

Department of Conservation, Division of Mines and Geology, August 2000. *A General Location Guide for Ultramafic Rocks in California - Areas More Likely to Contain Naturally-Occurring Asbestos.* Open File Report 2000-19.

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San Mateo County Assessor's Office. June 18, 2017. 555 County Center, First Floor, Redwood City, CA 94063. 650-363-4500. http://www.smcare.org/apps/parcelmaps/default.aspx

State of California Division of Oil, Gas, and Geothermal Resources website. http://maps.conservation.ca.gov/doms/doms-app.html. Accessed June 18, 2017.

USGS Historical Topographic Map Explorer website. http://historicalmaps.arcgis.com/usgs/. Accessed June 18, 2017.

12.0 LIMITATIONS

This ESA is intended to serve as an appropriate and reasonable inquiry regarding releases or threatened releases of hazardous substances and some naturally-occurring hazards on, at, or to the property that could be the subject of a response action for which a CERCLA liability protection would be needed. No warranty, expressed or implied, has been made, except that

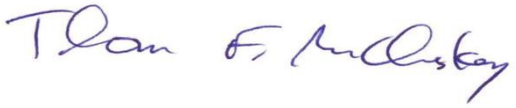
the services have been performed in general accordance with ASTM E 1527-13, Standard Practice for Environmental Site Assessment and updates.

Some of the information provided in this report is based upon personal interviews, research of available publicly accessible documents, records, aerial photographs, and maps held by government and private parties as well as reasonably observable Site conditions. Publicly accessible information cannot be relied upon to definitively confirm or deny the existence of recognized environmental conditions at the Site and therefore MCI is not responsible for the accuracy of the data provided by others nor the personal statements and recollections of those persons contacted. There is also a possibility that even with the proper review of this information that there may exist conditions on the property that could not be identified within the scope of the assessment or which were not reasonably identifiable from the available information. Changes in applicable standards can occur as the result of legislation or broadening knowledge that may invalidate, wholly or in part, the findings of this report.

13.0 QUALIFICATIONS AND SIGNATURES

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professionals as defined in Section 312.20 of 40 CFR 312. We have the specific qualifications, based on education, training, and experience, to assess a Site of the nature, history, and setting of the subject Site. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR 312.

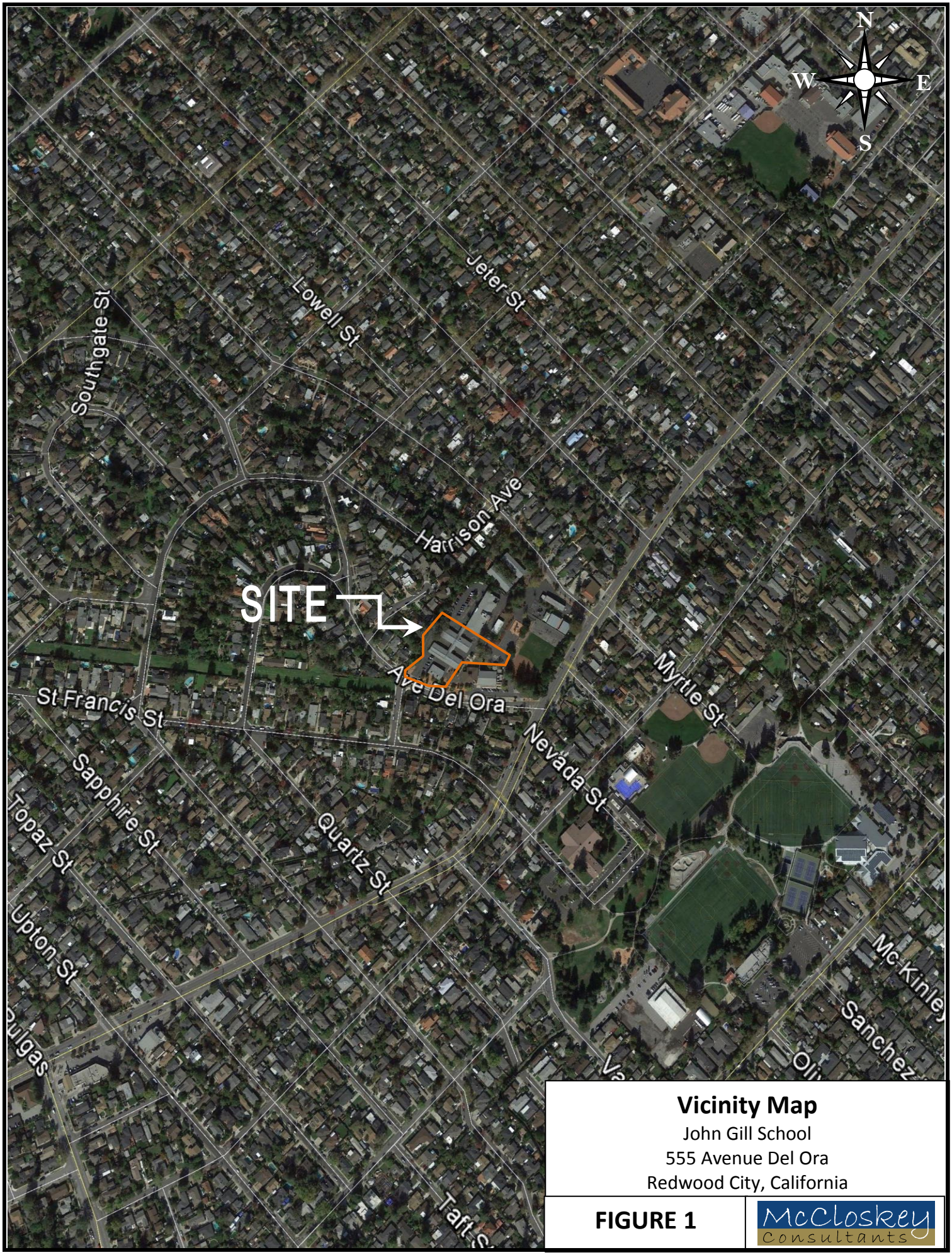




Belinda P. Blackie, P.E.
Senior Project Engineer

Thomas F. McCloskey, P.G., C.E.G., C.HG.
Principal Geologist

Figures



Vicinity Map

John Gill School
555 Avenue Del Ora
Redwood City, California

FIGURE 1

McCloskey Consultants



Site Plan

John Gill School
555 Avenida Del Ora
Redwood City, California

FIGURE 2

McCloskey Consultants

Appendix A

Site Photographs

John Gill School, Redwood City, CA



View of Site (Class and Art Room Portable) Facing North from Avenue Del Ora



View of Classroom Buildings Facing West



View of Classroom Building Facing North



Elevator Building



Elevator Sump Water Collection Drum



View of Site Facing East from Classroom Buildings

John Gill School, Redwood City, CA



Art Room Interior



Janitorial Materials Storage in Storage Room



Flammable Materials Storage Cabinet in Storage Room



Typical Classroom Interior



Hetch-Hetchy Easement Northwest of Site



Hetch-Hetchy Easement USA Marking on Site

Appendix B

Completed Environmental Questionnaire & RCSD-Provided Documentation

Phase I ESA Questionnaire - Owner/Occupant

John Gill School, Redwood City, CA

In an attempt to help identify the presence of possible recognized environmental conditions associated with the property, please answer the following questions as specifically as reasonably feasible and in good faith to the extent of your knowledge. Also, please attach any relevant documents or reports, including previous environmental reports, geotechnical reports, risk assessments, hazardous materials management plans, chemical inventories, environmental/hazardous waste generator permits, underground storage tank documents, records of activity and use limitations, etc.

All current and historic street addresses: 555 AVE. DEL ORA

All assessor's parcel numbers (APNs): _____

How associated with Site/years associated: DISTRICT EMPLOYEE 31

Size of parcel(s)/property: 6.90 ACRES

Do you have any commonly known, reasonable ascertainable, or specialized knowledge or experience related to the Site or nearby properties? ☒Yes (describe below) ☐No

SCHOOL DISTRICT EMPLOYEE for 31 YEARS

Please provide any information you have regarding *current* Site owners/tenants and uses of the Site (describe processes and hazardous materials usage):

Owner/Tenant Name	Dates of Ownership/ Occupancy	Site Use
REDWOOD CITY SCHOOL DISTRICT	JULY 27, 1931	

Please provide any information you have regarding *past* owners/tenants and uses of the Site (describe processes and hazardous materials usage), including owner and tenant names, dates of ownership/occupancy, Site uses, and contact information.

Owner/Tenant Name	Dates of Ownership/ Occupancy	Site Use	Contact Information
REDWOOD CITY SCHOOL DISTRICT	1931 to PRESENT		DON DIAS 650 670-2943

ALL MONITORING AND/OR REMOVAL OF ANY HAZARDOUS MATERIALS done per AHERA

Were or are any of these structures on-site:

Aboveground storage tanks	☐Yes	☒No	☐Don't Know
Agricultural wells	☐Yes	☒No	☐Don't Know
Boilers	☒Yes	☐No	☐Don't Know
Burning areas	☐Yes	☒No	☐Don't Know
Chemical use areas	☐Yes	☒No	☐Don't Know
Domestic/agricultural supply wells	☐Yes	☒No	☐Don't Know
Drainage/disposal ponds	☐Yes	☒No	☐Don't Know
Dry wells	☐Yes	☒No	☐Don't Know
Emergency generators	☐Yes	☒No	☐Don't Know
Equipment maintenance or auto servicing areas	☐Yes	☒No	☐Don't Know
Garbage disposal/burning areas	☐Yes	☒No	☐Don't Know
Monitoring wells	☐Yes	☒No	☐Don't Know
Petroleum pipelines	☐Yes	☒No	☐Don't Know
Petroleum wells	☐Yes	☒No	☐Don't Know
Ponds, streams, or drainage ditches	☐Yes	☒No	☐Don't Know
Railroad lines	☐Yes	☒No	☐Don't Know
Stockpiles of soil or debris	☐Yes	☒No	☐Don't Know
Septic systems	☐Yes	☑No	☐Don't Know
Sumps	☐Yes	☒No	☐Don't Know
Transformers	☒Yes	☐No	☐Don't Know
Underground storage tanks	☐Yes	☒No	☐Don't Know

If yes to any of the previous, please briefly describe or attach documentation: LOW PRESSURE HOT WATER BOILERS REMOVED IN 1998 ALO310 DSA JOB
PG&E OWNED TRANSFORMERS FOR ELECTRICAL POWER

Number, type and square footage of *current* on-site structure(s): 16 structures, WOOD FRAME AND CONCRETE 44,851 SQUARE FEET

Construction date/age of *current* on-site structure(s): SEE Attached SHEET with DSA A #s

Number, type and square footage of *previous* on-site structure(s): INTERIM HOUSING PORTABLES (5)
INSTALLED IN MAIN PARKING LOT IN 1998 AND REMOVED IN 2000

McCloskey Consultants
ENVIRONMENTAL & GEOLOGIC ASSESSMENTS

Construction date/age of *previous* on-site structure(s): NEW IN 1998 REMOVED IN 2000

Historical use of property (if known): POSSIBLE BOYS SCHOOL PRIOR TO JOHN GILL OR EAGLE HILL.

Was the site previously used for agricultural purposes? ☐Yes ☐No ☒Don't Know

Are you aware of the historical use/application of agricultural chemicals on the Site? ☐Yes ☐No ☒Don't Know

Are agricultural chemicals (pesticides/herbicides) stored, applied, or mixed/formulated on the Site? ☒Yes ☐No ☐Don't Know

Applied for Broadleaf & Weed Control under Dept. of Ag.

Is/was heating oil or fuel oil utilized at the Site for heating purposes? ☐Yes ☒No ☐Don't Know

Describe how hazardous materials, if any, are stored

☒None present

Describe any secondary containment system for hazardous materials.

When site has asbestos abatement needs a secondary shipping container is brought in to store then haul away when job is completed. When site is doing lead containment, a 55 gallon drum is placed on site.

☐None present

Do you have a current inventory of all chemicals used on-site? ☒Yes ☐No ☐Don't Know

(if yes, please provide a copy) SDS Binder on site ☐None present

Do you treat or dispose of chemical waste on-site? ☐Yes ☒No ☐Don't Know

If yes, please describe.

Do you have a permit to treat chemical waste on-site? ☐Yes ☒No ☐Don't Know

If yes, please describe.

McCloskey Consultants
ENVIRONMENTAL & GEOLOGIC ASSESSMENTS

How is chemical waste disposed/company name responsible for disposal? Any chemical waste such as paint, etc is at our cooperation yard and picked up on an as needed basis by a licensed transporter

Is any chemical waste disposed to the sanitary sewer? ☒Yes ☐No ☐Don't Know

If yes, please describe.

Custodial Green such as Suprox or Hydrogen Peroxide after cleaning has been completed.

Are there any air emissions associated with the Site? ☐Yes ☑No ☐Don't Know
If yes, please describe.

Has your business received a violation notice regarding hazardous materials usage, storage or disposal practices? ☐Yes ☑No ☐Don't Know
If yes, please describe.

Based on your knowledge and/or experience with the Site, are there any obvious indications that contamination of the property is or may be present? ☐ Yes (if yes, please provide information below)
☒ No

Please provide any information you have regarding spills or other chemical releases that have occurred on the site and any cleanup activities that have been required and/or performed.

None that I am aware of.

Do you have knowledge of any environmental cleanup liens or activity and land use limitations (including engineering or institutional controls or land use restrictions) filed or recorded for the Site under federal, tribal, state, or local law? ☒Yes (if yes, please provide information below)
☐ No

Asbestos Abatement and Lead Containment



Do you have any specialized knowledge of, or experience with, similar business, development, or facility types to this Site or nearby properties that would be material to the environmental condition, presence of chemicals, and/or uses of the Site and nearby properties? ☐Yes (if yes, please provide information below) ☒No

Do you have any knowledge of pending, threatened, or past litigation or administrative proceedings relevant to hazardous substances or petroleum products in, on, or from this Site?

☐ Yes (if yes, please provide information below) ☒ No

Have you received notice from any governmental entity regarding possible violation of environmental laws or liability relating to hazardous substances or petroleum products associated with the Site?

☐ Yes (if yes, please provide information below) ☒ No

Has an asbestos survey of the on-site structures been performed? ☒ Yes ☐ No ☐ Don't Know

If yes, please attach any available reports. EVERY 3 YEARS - AHERA

Has a lead-based paint survey of the on-site structures been performed? ☒ Yes ☐ No ☐ Don't Know

If yes, please attach any available reports.

ON AN AS NEEDED BASIS

Has an environmental soil and ground water sampling been conducted at this Site? ☐ Yes ☐ No ☒ Don't Know

If yes, please attach available reports.

Completed by: DONALD DIAS Donald Dias 6/20/17

Name (Print) Signature Date

REDWOOD CITY SCHOOL DISTRICT 650-670-2943

Entity Representing Contact Telephone #/Email

ddias@rcsdk8.NET

McCloskey Consultants
ENVIRONMENTAL & GEOLOGIC ASSESSMENTS

Phase I ESA Questionnaire – "User"

John Gill School, Redwood City, CA

For the "User" of this Phase I environmental site assessment to qualify for Landowner Liability Protections offered by the Small Business Liability Relief and Brownsfields Revitalization Act of 2001, the "User" must provide the following information to the Environmental Professional prior to completion of the Phase I.

In an attempt to help identify the presence of possible recognized environmental conditions associated with the property, please answer the following questions as specifically as reasonably feasible and in good faith to the extent of your knowledge. Also, please attach any relevant documents or reports, including previous environmental reports, geotechnical reports, risk assessments, hazardous materials management plans, chemical inventories, environmental/hazardous waste generator permits, underground storage tank documents, records of activity and use limitations, etc.

What is the purpose of this Phase I? TO UNDERSTAND the USAGE of the SITE, both PAST + PRESENT

Are there any proposed changes in Site use following the property transaction?

☐Yes (describe below) ☐No N/A

If applicable, does the Site purchase price reflect fair market value for the property?

☐Yes (describe below) ☐No ☒Not Applicable

Do you have any commonly known, reasonable ascertainable or specialized knowledge or experience related to the Site or nearby properties? ☒Yes (describe below) ☐No

31 YEARS AS A DISTRICT EMPLOYEE

Based on your knowledge and/or experience with the Site, are there any obvious indications that contamination of the property is or may be present? ☐Yes (describe below) ☒No

Please provide any information you have regarding current and/or past owners/tenants and uses of the Site. Please also include any available contact information for past owners/tenants.

ALWAYS EDUCATION

Please provide any information you have regarding chemicals or other hazardous materials currently and/or historically present on the Site.

CUSTODIAL CLEANING
PERIODIC WEED CONTROL
PERIODIC BROAD LEAF CONTROL
FERTILIZER ON SPORTS TURF
ASBESTOS & LEAD

What is the current zoning of the Site? Do you have knowledge of what the site historically was zoned, if different from the current zoning?

I do not know what the SITE IS Zoned AS RESIDENTIAL?

Please provide any information you have regarding past spills or other chemical releases that have occurred on the Site and any cleanup activities that have been required and/or performed.

NONE

Do you have knowledge of any environmental cleanup liens or activity and land use limitations (including engineering or institutional controls or land use restrictions) filed or recorded for the Site under federal, tribal, state, or local law? ☐ Yes (if yes, please provide information below) ☒ No

As the User of this Environmental Site Assessment, do you have any specialized knowledge of, or experience with, similar business, development, or facility types to this Site or nearby properties that would be material to the environmental condition, presence of chemicals, and/or uses of the Site and nearby properties?
☐ Yes (if yes, please provide information below) ☒ No

Does the purchase price being paid for this Site reasonably reflect the fair market value of the property?
☐ Yes ☐ No (if no, please indicate if the difference in the purchase price and the fair market value is due to the presence of releases or threatened releases of hazardous substances.)

N/A

Do you have any knowledge of pending, threatened, or past litigation or administrative proceedings relevant to hazardous substances or petroleum products in, on, or from this Site?
☐ Yes (if yes, please provide information below) ☒ No

Have you received notice from any governmental entity regarding possible violation of environmental laws or liability relating to hazardous substances or petroleum products associated with the Site?
☐ Yes (if yes, please provide information below) ☒ No

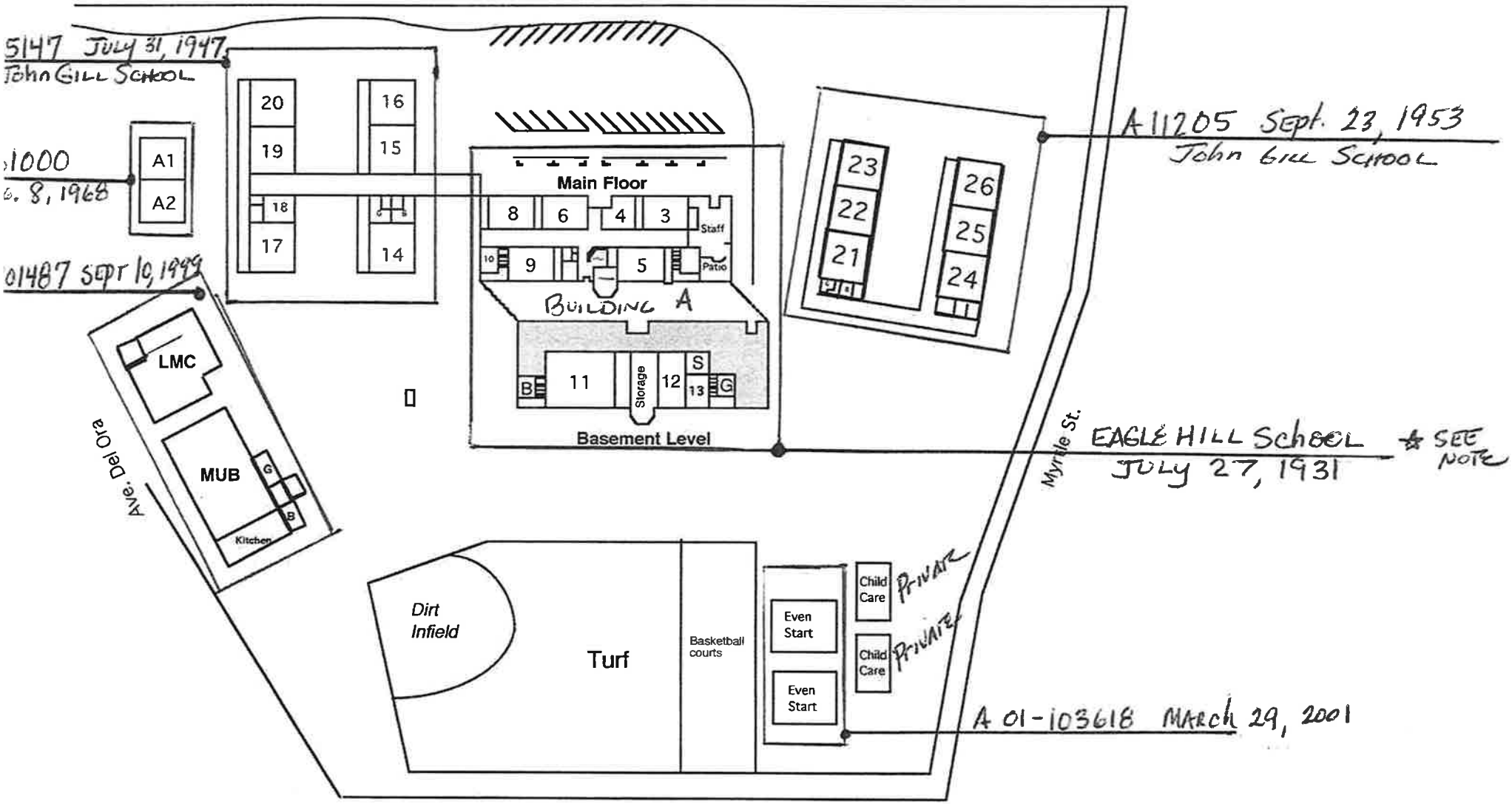
Completed by: Donald Dias Donald Dias 6-20-17

Name (Print) Signature Date

Redwood City School District 650-670-2943

Entity Representing Contact Telephone #/Email

ddias@rcsdk8.net



★ Note - A 11078 was the "Field Act" work for Seismic Upgrades on Aug 12, 1953
Building A only

A 60310 the entire site was modernized in 1998 Approval Trailer
August 30, 2001

scale: 1" = 100'

PREPARED BY
Alliant Insurance Services, Inc.
1301 Dove Street
Suite 200
Newport Beach, CA 92660 (949) 756-0271

SIPP PROPERTY SCHEDULE
REDWOOD CITY SCHOOL DISTRICT (SMCSIG)

Includes B & M

Real Property Trend Factor: 0.90%
Personal Property Trend Factor: 0.36%

November 01, 2016

Loc #	2nd Id	Address, City, Zip	Occupancy	Construction	Auto Spklr	Year Built	Year Apprs		Zone	Real Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI / Rents	Totals
110	H	MAINTENANCE WAREHOUSE	2,900 SQ. FT.	Class: S	No	2006	2014	EQ:	A1	No	No	No	*2015*	*$198,500*	*$85,900*	*$0*	*$284,400*
		501 JAMES AVENUE	MAINTENANCE WAREHOUSE	ALL STEEL				Flood:	X	Yes	Yes	Yes	**2016**	**$198,500**	**$85,900**	**$0**	**$284,400**
		REDWOOD CITY CA 94062	SITE														
		Stories: 1															
Lat: 37.481525		Lng. -122.236765	Pct. Sprnkl: 0%														
110	I	MAINTENANCE STORAGE	3,200 SQ. FT.	Class: S	No	2006	2014	EQ:	A1	No	No	No	*2015*	*$128,000*	*$40,000*	*$0*	*$168,000*
		501 JAMES AVENUE	MAINTENANCE WAREHOUSE	ALL STEEL				Flood:	X	Yes	Yes	Yes	**2016**	**$128,000**	**$40,000**	**$0**	**$168,000**
		REDWOOD CITY CA 94062	SITE														
		Stories: 1															
Lat: 37.481525		Lng. -122.236765	Pct. Sprnkl: 0%														
111		CLASSROOM 14 /	1,824 SQ. FT.	Class: D	No	1949	2014	EQ:	A1	No	No	No	*2015*	*$441,000*	*$62,000*	*$0*	*$503,000*
		RESTROOMS	JOHN GILL ELEMENTARY	ALL COMB (WOOD FRAME)				Flood:	X	Yes	Yes	Yes	**2016**	**$441,000**	**$62,000**	**$0**	**$503,000**
		555 AVENUE DEL ORA															
		REDWOOD CITY CA 94062	Pct. Sprnkl: 0%														
		Stories: 1															
Lat: 37.473688		Lng. -122.241521															
111	A	CLASSROOMS 17-18	2,178 SQ. FT.	Class: D	No	1949	2014	EQ:	A1	No	No	No	*2015*	*$527,000*	*$74,100*	*$0*	*$601,100*
		BUILDING	JOHN GILL ELEMENTARY	ALL COMB (WOOD FRAME)				Flood:	X	Yes	Yes	Yes	**2016**	**$527,000**	**$74,100**	**$0**	**$601,100**
		555 AVENUE DEL ORA															
		REDWOOD CITY CA 94062	Pct. Sprnkl: 0%														
		Stories: 1															
Lat: 37.473688		Lng. -122.241521															
111	B	CLASSROOMS 15-16	1,824 SQ. FT.	Class: D	No	1949	2014	EQ:	A1	No	No	No	*2015*	*$441,000*	*$62,000*	*$0*	*$503,000*
		BUILDING	JOHN GILL ELEMENTARY	ALL COMB (WOOD FRAME)				Flood:	X	Yes	Yes	Yes	**2016**	**$441,000**	**$62,000**	**$0**	**$503,000**
		555 AVENUE DEL ORA															
		REDWOOD CITY CA 94062	Pct. Sprnkl: 0%														
		Stories: 1															
Lat: 37.473688		Lng. -122.241521															

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Real Property Trend Factor: 0.90%
Personal Property Trend Factor: 0.36%

November 01, 2016

Loc #	2nd Id	Address, City, Zip	Occupancy	Construction	Auto Spklr	Year Built	Year Apprs	Zone	Real Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI / Rents	Totals
111	C	CLASSROOMS 19-20	2,178 SQ. FT.	Class: D	No	1949	2014	EQ: A1	No	No	No	*2015*	*$527,000*	*$74,100*	*$0*	*$601,100*
		BUILDING	JOHN GILL ELEMENTARY	ALL COMB (WOOD FRAME)				Flood: X	Yes	Yes	Yes	**2016**	**$527,000**	**$74,100**	**$0**	**$601,100**
		555 AVENUE DEL ORA														
		REDWOOD CITY CA 94062	Pct. Sprnkl: 0%													
		Stories: 1														
Lat: 37.473688		Lng. -122.241521														
111	D	CLASSROOMS 21-23	3,300 SQ. FT.	Class: D	No	1949	2014	EQ: A1	No	No	No	*2015*	*$799,000*	*$112,200*	*$0*	*$911,200*
		BUILDING	JOHN GILL ELEMENTARY	ALL COMB (WOOD FRAME)				Flood: X	Yes	Yes	Yes	**2016**	**$799,000**	**$112,200**	**$0**	**$911,200**
		555 AVENUE DEL ORA														
		REDWOOD CITY CA 94062	Pct. Sprnkl: 0%													
		Stories: 1														
Lat: 37.473688		Lng. -122.241521														
111	E	CLASSROOMS 24-26	3,180 SQ. FT.	Class: D	No	1949	2014	EQ: A1	No	No	No	*2015*	*$770,500*	*$108,100*	*$0*	*$878,600*
		BUILDING	JOHN GILL ELEMENTARY	ALL COMB (WOOD FRAME)				Flood: X	Yes	Yes	Yes	**2016**	**$770,500**	**$108,100**	**$0**	**$878,600**
		555 AVENUE DEL ORA														
		REDWOOD CITY CA 94062	Pct. Sprnkl: 0%													
		Stories: 1														
Lat: 37.473688		Lng. -122.241521														
111	F	LIBRARY/MEDIA CENTER	3,645 SQ. FT.	Class: D	Yes	1949	2014	EQ: A1	No	No	No	*2015*	*$922,000*	*$81,000*	*$0*	*$1,003,000*
		555 AVENUE DEL ORA	JOHN GILL ELEMENTARY	ALL COMB (WOOD FRAME)				Flood: X	Yes	Yes	Yes	**2016**	**$922,000**	**$81,000**	**$0**	**$1,003,000**
		REDWOOD CITY CA 94062														
		Stories: 1	Pct. Sprnkl: 100%													
Lat: 37.473688		Lng. -122.241521														
111	G	MAIN BUILDING	14,070 SQ. FT.	Class: C	No	1927	2014	EQ: A1	No	No	No	*2015*	*$3,545,000*	*$520,900*	*$0*	*$4,065,900*
		555 AVENUE DEL ORA	JOHN GILL ELEMENTARY	MASONRY CONST/WOOD ROOF				Flood: X	Yes	Yes	Yes	**2016**	**$3,545,000**	**$520,900**	**$0**	**$4,065,900**
		REDWOOD CITY CA 94062														
		Stories: 2	Pct. Sprnkl: 0%													
Lat: 37.473688		Lng. -122.241521														
111	H	MULTI-USE/THEATER/FOOD	5,764 SQ. FT.	Class: D	Yes	2001	2014	EQ: A1	No	No	No	*2015*	*$1,390,000*	*$74,100*	*$0*	*$1,464,100*
		SERVICE	JOHN GILL ELEMENTARY	ALL COMB (WOOD FRAME)				Flood: X	Yes	Yes	Yes	**2016**	**$1,390,000**	**$74,100**	**$0**	**$1,464,100**
		555 AVENUE DEL ORA														
		REDWOOD CITY CA 94062	Pct. Sprnkl: 100%													
		Stories: 1														

The above location is continued on the next page.

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SIPP PROPERTY SCHEDULE
REDWOOD CITY SCHOOL DISTRICT (SMCSIG)

Includes B & M

Real Property Trend Factor: 0.90%
Personal Property Trend Factor: 0.36%

November 01, 2016

Loc #	2nd Id	Address, City, Zip	Occupancy	Construction	Auto Spklr	Year Built	Year Apprs	Zone	Real Prop	Pers Prop	BI / Rents	Year	Real Property	Personal Property	BI / Rents	Totals
Lat: 37.473688		Lng. -122.241521														
111	I	PORTABLE/MODULAR CLASSROOM ANNEX I & II 555 AVENUE DEL ORA REDWOOD CITY CA 94062 Stories: 1	2,108 SQ. FT. JOHN GILL ELEMENTARY Pct. Sprnkl: 0%	Class: D ALL COMB (WOOD FRAME)	No	1949	2014	EQ: A1 Flood: X	No Yes	No Yes	No Yes	*2015* **2016**	*$252,000* **$252,000**	*$57,800* **$57,800**	*$0* **$0**	*$309,800* **$309,800**
Lat: 37.473688		Lng. -122.241521														
111	J	PORTABLE/MODULAR CDC 555 AVENUE DEL ORA REDWOOD CITY CA 94062 Stories: 1	1,283 SQ. FT. JOHN GILL ELEMENTARY Pct. Sprnkl: 0%	Class: D ALL COMB (WOOD FRAME)	No	1990	2014	EQ: A1 Flood: X	No Yes	No Yes	No Yes	*2015* **2016**	*$152,000* **$152,000**	*$57,800* **$57,800**	*$0* **$0**	*$209,800* **$209,800**
Lat: 37.473688		Lng. -122.241521														
111	K	PORTABLE/MODULAR CDC 555 AVENUE DEL ORA REDWOOD CITY CA 94062 Stories: 1	960 SQ. FT. JOHN GILL ELEMENTARY Pct. Sprnkl: 0%	Class: D ALL COMB (WOOD FRAME)	No	1990	2014	EQ: A1 Flood: X	No Yes	No Yes	No Yes	*2015* **2016**	*$114,000* **$114,000**	*$57,800* **$57,800**	*$0* **$0**	*$171,800* **$171,800**
Lat: 37.473688		Lng. -122.241521														
111	L	ENVIROPLEX, INC. PORTABLE/MODULAR EVENSTART 555 AVENUE DEL ORA REDWOOD CITY CA 94062 Stories: 1	1,440 SQ. FT. JOHN GILL ELEMENTARY Pct. Sprnkl: 0%	Class: D ALL COMB (WOOD FRAME)	No	2001	2014	EQ: A1 Flood: X	No Yes	No Yes	No Yes	*2015* **2016**	*$171,000* **$171,000**	*$39,500* **$39,500**	*$0* **$0**	*$210,500* **$210,500**
Lat: 37.473688		Lng. -122.241521														
111	M	ENVIROPLEX, INC. PORTABLE/MODULAR EVENSTART 555 AVENUE DEL ORA REDWOOD CITY CA 94062 Stories: 1	1,920 SQ. FT. JOHN GILL ELEMENTARY Pct. Sprnkl: 0%	Class: D ALL COMB (WOOD FRAME)	No	2001	2014	EQ: A1 Flood: X	No Yes	No Yes	No Yes	*2015* **2016**	*$228,500* **$228,500**	*$39,500* **$39,500**	*$0* **$0**	*$268,000* **$268,000**
Lat: 37.473688		Lng. -122.241521														

PREPARED BY
Alliant Insurance Services, Inc.
1301 Dove Street
Suite 200
Newport Beach, CA 92660 (949) 756-0271

SIPP PROPERTY SCHEDULE
REDWOOD CITY SCHOOL DISTRICT (SMCSIG)

Includes B & M

Real Property Trend Factor: 0.90%
Personal Property Trend Factor: 0.36%

November 01, 2016

Loc #	2nd Id	Address, City, Zip	Occupancy	Construction	Auto Spklr	Year Built	Year Apprs		Zone	Real Prop	Pers Prop	Bl / Rents	Year	Real Property	Personal Property	Bl / Rents	Totals
111	N	ELEVATOR BUILDING	216 SQ. FT.	Class: S	No	2001	2014	EQ:	A1	No	No	No	*2015*	*$110,000*	*$0*	*$0*	*$110,000*
		555 AVENUE DEL ORA	JOHN GILL ELEMENTARY	ALL STEEL				Flood:	X	Yes	Yes	Yes	**2016**	**$110,000**	**$0**	**$0**	**$110,000**
		REDWOOD CITY CA 94062															
		Stories: 2	Pct. Sprnkl: 0%														
Lat: 37.473688		Lng. -122.241521															
111	O	LUNCH CANOPY	1,800 SQ. FT.	Class: S	No	1990	2014	EQ:	A1	No	No	No	*2015*	*$45,000*	*$0*	*$0*	*$45,000*
		555 AVENUE DEL ORA	JOHN GILL ELEMENTARY	ALL STEEL				Flood:	X	Yes	Yes	Yes	**2016**	**$45,000**	**$0**	**$0**	**$45,000**
		REDWOOD CITY CA 94062															
		Stories: 1	Pct. Sprnkl: 0														
Lat: 37.473688		Lng. -122.241521															
111	P	CARGO CONTAINER #1	160 SQ. FT.	Class: S	No	1980	2014	EQ:	A1	No	No	No	*2015*	*$3,000*	*$4,000*	*$0*	*$7,000*
		555 AVENUE DEL ORA	JOHN GILL ELEMENTARY	ALL STEEL				Flood:	X	Yes	Yes	Yes	**2016**	**$3,000**	**$4,000**	**$0**	**$7,000**
		REDWOOD CITY CA 94062															
		Stories: 1	Pct. Sprnkl: 0%														
Lat: 37.473688		Lng. -122.241521															
111	Q	CARGO CONTAINER #2	160 SQ. FT.	Class: S	No	1980	2014	EQ:	A1	No	No	No	*2015*	*$3,000*	*$4,000*	*$0*	*$7,000*
		555 AVENUE DEL ORA	JOHN GILL ELEMENTARY	ALL STEEL				Flood:	X	Yes	Yes	Yes	**2016**	**$3,000**	**$4,000**	**$0**	**$7,000**
		REDWOOD CITY CA 94062															
		Stories: 1	Pct. Sprnkl: 0%														
Lat: 37.473688		Lng. -122.241521															
111	R	CARGO CONTAINER #3	96 SQ. FT.	Class: S	No	1980	2014	EQ:	A1	No	No	No	*2015*	*$2,000*	*$2,000*	*$0*	*$4,000*
		555 AVENUE DEL ORA	JOHN GILL ELEMENTARY	ALL STEEL				Flood:	X	Yes	Yes	Yes	**2016**	**$2,000**	**$2,000**	**$0**	**$4,000**
		REDWOOD CITY CA 94062															
		Stories: 1	Pct. Sprnkl: 0%														
Lat: 37.473688		Lng. -122.241521															
111	S	COVERED WALKWAYS	1,185 SQ. FT.	Class: S	No	1949	2014	EQ:	A1	No	No	No	*2015*	*$45,000*	*$0*	*$0*	*$45,000*
		555 AVENUE DEL ORA	JOHN GILL ELEMENTARY	ALL STEEL				Flood:	X	Yes	Yes	Yes	**2016**	**$45,000**	**$0**	**$0**	**$45,000**
		REDWOOD CITY CA 94062															
		Stories: 1	Pct. Sprnkl: 0%														
Lat: 37.473688		Lng. -122.241521															

Appendix C

Environmental Database Report

John Gill Elementary School
555 Avenue Del Ora
Redwood City, CA 94062

Inquiry Number: 4955887.16s
June 05, 2017

EDR Summary Radius Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Detail Map	3
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Map Findings	8
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GEOCHECK ADDENDUM

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

555 AVENUE DEL ORA
REDWOOD CITY, CA 94062

COORDINATES

Latitude (North):	37.4743900 - 37° 28' 27.80''
Longitude (West):	122.2405580 - 122° 14' 26.00''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	567152.2
UTM Y (Meters):	4147566.5
Elevation:	59 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	U.S. Geological Survey

Target Property:	SW
Source:	U.S. Geological Survey

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140608
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
555 AVENUE DEL ORA
REDWOOD CITY, CA 94062

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	REDWOOD CITY SD-JOHN	555 AVENUE DEL ORA	HAZNET		TP
A2	REDWOOD CITY SCHOOL	555 AVENUE DE ORA	RCRA-SQG, FINDS, ECHO, HAZNET		TP
A3	REDWOOD CITY SD-JOHN	555 AVENUE DEL ORA	HAZNET		TP
B4	CITY OF REDWOOD CITY	2190 JEFFERSON	SWEEPS UST	Lower	112, 0.021, ENE
B5	FIRE STATION #10	2190 JEFFERSON	San Mateo Co. BI	Lower	112, 0.021, ENE
6	WEST BAY MOBILE AUTO	1135 HARRISON AVE	EDR Hist Auto	Lower	124, 0.023, North
7	GLOBAL GARAGE LLC	1105 MADISON AVE	EDR Hist Auto	Lower	648, 0.123, East
8	PATRICIAN FINISHES	322 KING ST	RCRA-SQG	Lower	1099, 0.208, NNW
9	JEFFERSON CHEVRON	3139 JEFFERSON AVE	LUST, HIST UST	Higher	2073, 0.393, SW
C10	REDWOOD CITY SCHOOL	601 JAMES AVE.	LUST, UST, SWEEPS UST, HIST UST	Lower	2091, 0.396, NNE
C11	REDWOOD CITY SCHOOL	601 JAMES	LUST, HIST CORTESE	Lower	2091, 0.396, NNE
12	ROBISON PROPERTY	827 EL CAMINO REAL	ENVIROSTOR, SLIC, VCP	Lower	4278, 0.810, NNE
13	TOWNE FORD SALES	1601 EL CAMINO REAL	LUST, HIST UST, Notify 65	Lower	4287, 0.812, ENE
14	FORMER DEMMA PARCELS	104 AND 112 CEDAR	ENVIROSTOR	Lower	4716, 0.893, ENE
15	ARTON MANAGEMENT/INV	570 EL CAMINO REAL	ENVIROSTOR, LUST, HIST UST	Lower	4877, 0.924, North
16	COOKS AUTO BODY	1104 MAIN STREET	RCRA-SQG, ENVIROSTOR, LUST, FINDS, ECHO	Lower	4961, 0.940, NE
17	OAK KNOLL STATION	590 CANYON ROAD	Notify 65	Higher	5260, 0.996, West

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
REDWOOD CITY SD-JOHN 555 AVENUE DEL ORA REDWOOD CITY, CA 94062	HAZNET GEPAID: CAC002604890	N/A
REDWOOD CITY SCHOOL 555 AVENUE DE ORA REDWOOD CITY, CA 94062	RCRA-SQG EPA ID:: CAD981162894 FINDS Registry ID:: 110002679290 ECHO HAZNET GEPAID: CAD981162894	CAD981162894
REDWOOD CITY SD-JOHN 555 AVENUE DEL ORA REDWOOD CITY, CA 94062	HAZNET GEPAID: CAC002579747	N/A

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA generators list

RCRA-SQG: A review of the RCRA-SQG list, as provided by EDR, and dated 12/12/2016 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
PATRICIAN FINISHES	322 KING ST	NNW 1/8 - 1/4 (0.208 mi.)	8	9

State- and tribal - equivalent CERCLIS

ENVIROSTOR: A review of the ENVIROSTOR list, as provided by EDR, and dated 01/30/2017 has revealed that there are 4 ENVIROSTOR sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ROBISON PROPERTY	***827 EL CAMINO REAL***	***NNE 1/2 - 1 (0.810 mi.)***	***12***	***11***
Facility Id: 60001444				
Status: Active				
FORMER DEMMA PARCELS	104 AND 112 CEDAR	ENE 1/2 - 1 (0.893 mi.)	14	11
Facility Id: 60001045				
Status: Refer: 1248 Local Agency				
ARTON MANAGEMENT/INV	***570 EL CAMINO REAL***	***N 1/2 - 1 (0.924 mi.)***	***15***	***12***
Facility Id: 41550010				
Status: Refer: Other Agency				
COOKS AUTO BODY	***1104 MAIN STREET***	***NE 1/2 - 1 (0.940 mi.)***	***16***	***12***
Facility Id: 60001847				
Status: Inactive - Action Required				

State and tribal leaking storage tank lists

LUST: A review of the LUST list, as provided by EDR, has revealed that there are 3 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
JEFFERSON CHEVRON	***3139 JEFFERSON AVE***	***SW 1/4 - 1/2 (0.393 mi.)***	***9***	***9***
Database: LUST REG 2, Date of Government Version: 09/30/2004				
Database: SAN MATEO CO. LUST, Date of Government Version: 03/15/2017				
Database: LUST, Date of Government Version: 03/13/2017				
Status: Open - Verification Monitoring				
Facility Status: Pollution Characterization				
Facility Id: 330179				
Facility Status: 5C- Pollution Characterization				
Global Id: T0608189635				
Global ID: T0608189635				

Lower Elevation	Address	Direction / Distance	Map ID	Page
REDWOOD CITY SCHOOL	***601 JAMES AVE.***	***NNE 1/4 - 1/2 (0.396 mi.)***	***C10***	***10***
Database: LUST REG 2, Date of Government Version: 09/30/2004				
Facility Status: Case Closed				
date9: 8/5/2002				
REDWOOD CITY SCHOOL	***601 JAMES***	***NNE 1/4 - 1/2 (0.396 mi.)***	***C11***	***10***
Database: SAN MATEO CO. LUST, Date of Government Version: 03/15/2017				
Database: LUST, Date of Government Version: 03/13/2017				
Status: Completed - Case Closed				
Facility Id: 330068				
Facility Status: 9- Case Closed				

EXECUTIVE SUMMARY

Global Id: T0608100420
Global ID: T0608100420

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Registered Storage Tanks

SWEEPS UST: A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there is 1 SWEEPS UST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CITY OF REDWOOD CITY Status: A Comp Number: 330169	2190 JEFFERSON	ENE 0 - 1/8 (0.021 mi.)	B4	8

Other Ascertainable Records

San Mateo Co. BI: A review of the San Mateo Co. BI list, as provided by EDR, and dated 03/15/2017 has revealed that there is 1 San Mateo Co. BI site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
FIRE STATION #10 Facility Id: FA0011296	2190 JEFFERSON	ENE 0 - 1/8 (0.021 mi.)	B5	9

HIST CORTESE: A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there is 1 HIST CORTESE site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
REDWOOD CITY SCHOOL Reg Id: 41-0441	***601 JAMES***	***NNE 1/4 - 1/2 (0.396 mi.)***	***C11***	***10***

Notify 65: A review of the Notify 65 list, as provided by EDR, and dated 12/16/2016 has revealed that there are 2 Notify 65 sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
OAK KNOLL STATION	590 CANYON ROAD	W 1/2 - 1 (0.996 mi.)	17	13

Lower Elevation	Address	Direction / Distance	Map ID	Page
TOWNE FORD SALES	***1601 EL CAMINO REAL***	***ENE 1/2 - 1 (0.812 mi.)***	***13***	***11***

EXECUTIVE SUMMARY

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

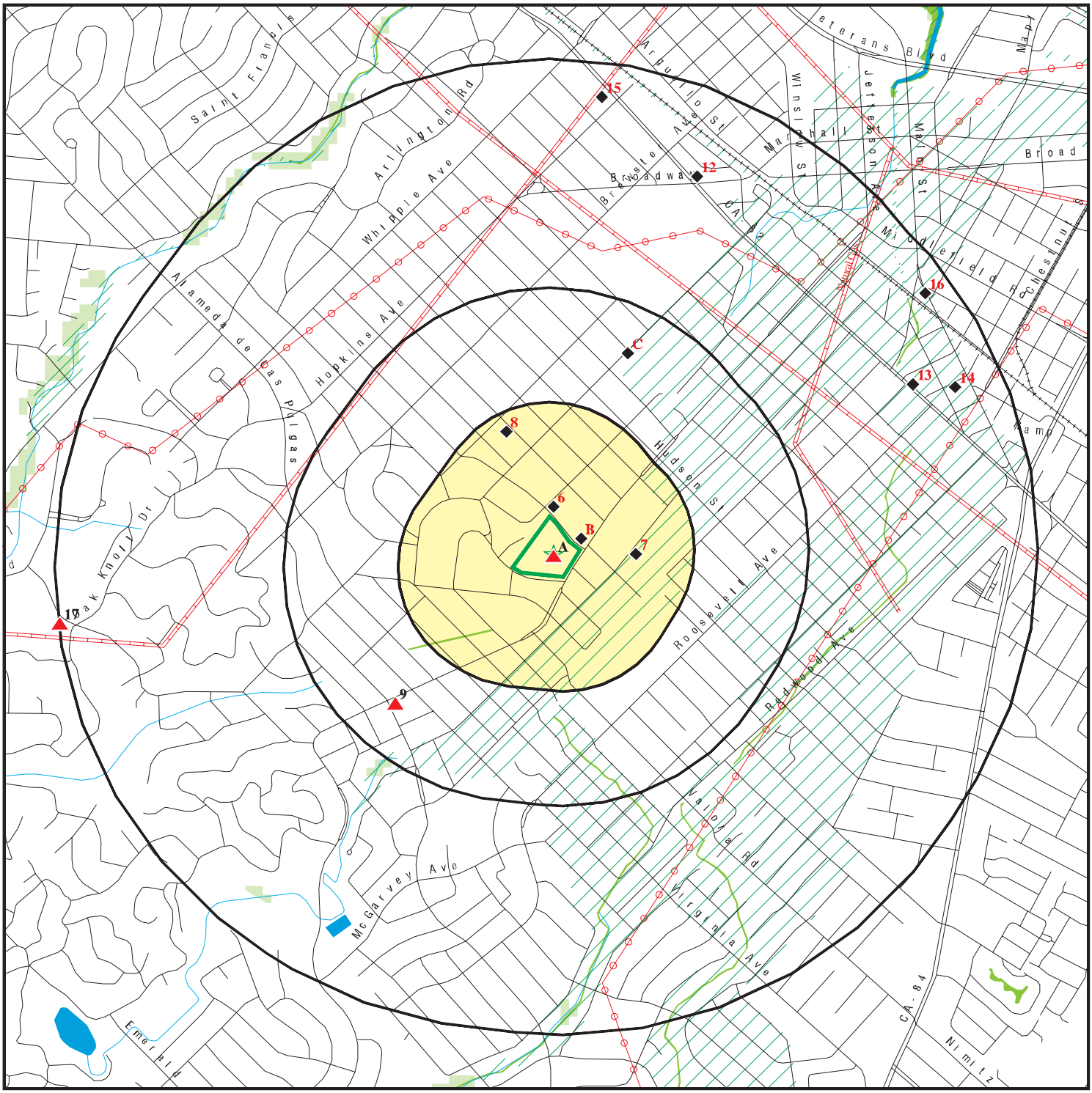
EDR Hist Auto: A review of the EDR Hist Auto list, as provided by EDR, has revealed that there are 2 EDR Hist Auto sites within approximately 0.125 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
WEST BAY MOBILE AUTO	1135 HARRISON AVE	N 0 - 1/8 (0.023 mi.)	6	9
GLOBAL GARAGE LLC	1105 MADISON AVE	E 0 - 1/8 (0.123 mi.)	7	9

Count: 2 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
REDWOOD CITY	S109149555	SEQUOIA ALTERNATIVE SCHOOL	435, 455, 461 5TH AVENUE AND 4	94063	ENVIROSTOR, SCH
REDWOOD CITY	S105954452	SEQUOIA STATION SHOPPING CENTER	INTERSECTION OF EL CAMINO REAL	94063	ENVIROSTOR

OVERVIEW MAP - 4955887.16S



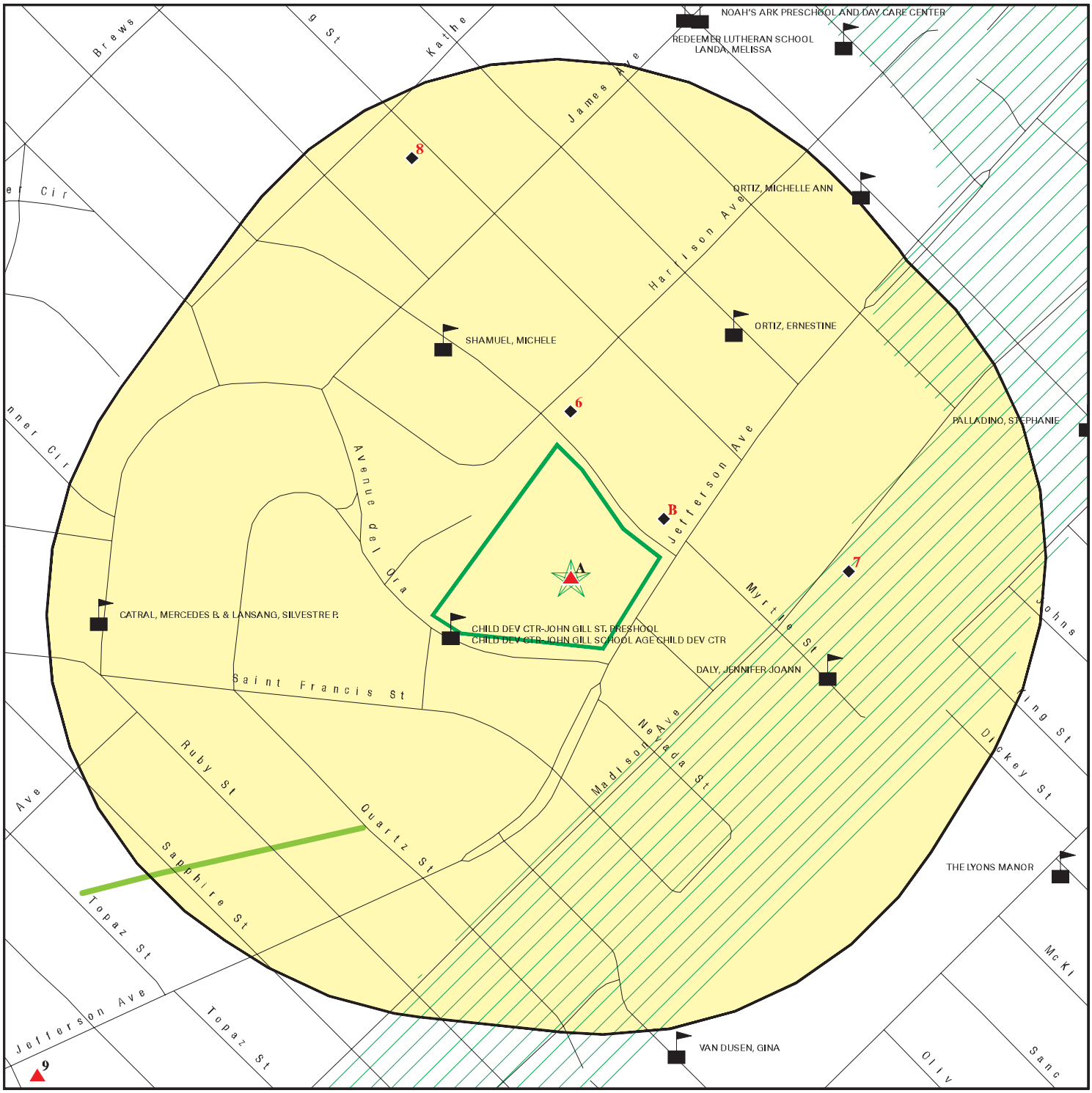
- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Pipelines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: John Gill Elementary School	CLIENT: McCloskey Consultants Inc
ADDRESS: 555 Avenue Del Ora Redwood City CA 94062	CONTACT: Tom Mccloskey
LAT/LONG: 37.47439 / 122.240558	INQUIRY #: 4955887.16s DATE: June 05, 2017 10:10 am

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DETAIL MAP - 4955887.16S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

0 1/16 1/8 1/4 Miles

Indian Reservations BIA

100-year flood zone

500-year flood zone

National Wetland Inventory

State Wetlands

Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: John Gill Elementary School	CLIENT: McCloskey Consultants Inc
ADDRESS: 555 Avenue Del Ora Redwood City CA 94062	CONTACT: Tom Mccloskey
LAT/LONG: 37.47439 / 122.240558	INQUIRY #: 4955887.16s DATE: June 05, 2017 10:13 am

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	0.001		0	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250	1	0	1	NR	NR	NR	2
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		0	0	0	4	NR	4
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	0	3	NR	NR	3

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
SLIC	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		1	0	NR	NR	NR	1
HIST UST	0.250		0	0	NR	NR	NR	0
CA FID UST	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	0.001		0	NR	NR	NR	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.001		0	NR	NR	NR	NR	0
FINDS	0.001	1	0	NR	NR	NR	NR	1
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
ECHO	0.001	1	0	NR	NR	NR	NR	1
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
San Mateo Co. BI	0.250		1	0	NR	NR	NR	1
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	0.001		0	NR	NR	NR	NR	0
ENF	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
HAZNET	0.001	3	0	NR	NR	NR	NR	3
ICE	0.001		0	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	0	1	NR	NR	1
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.001		0	NR	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
PEST LIC	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	2	NR	2
UIC	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001		0	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		2	NR	NR	NR	NR	2
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		6	4	1	4	6	0	21

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1
Target
Property

REDWOOD CITY SD-JOHN GILL ELEMENTARY
555 AVENUE DEL ORA
REDWOOD CITY, CA 94062

HAZNET

S112954270
N/A

Actual:
59 ft.

Click here for full text details

HAZNET
GEPAID: CAC002604890

A2
Target
Property

REDWOOD CITY SCHOOL DIST
555 AVENUE DE ORA
REDWOOD CITY, CA 94062

RCRA-SQG
FINDS
ECHO
HAZNET

1000438508
CAD981162894

Actual:
59 ft.

Click here for full text details

RCRA-SQG
EPA Id: CAD981162894

FINDS
Registry ID:: 110002679290

HAZNET
GEPAID: CAD981162894

A3
Target
Property

REDWOOD CITY SD-JOHN GILL ELEMENTARY
555 AVENUE DEL ORA
REDWOOD CITY, CA 94062

HAZNET

S112938963
N/A

Actual:
59 ft.

Click here for full text details

HAZNET
GEPAID: CAC002579747

B4
ENE
< 1/8
0.021 mi.
112 ft.

CITY OF REDWOOD CITY/FIRE STATION #2
2190 JEFFERSON
REDWOOD CITY, CA 94063

SWEEPS UST

S106924633
N/A

Relative:
Lower

Click here for full text details

SWEEPS UST
Status: A
Comp Number: 330169

B5
ENE
< 1/8
0.021 mi.
112 ft.

Relative:
Lower

FIRE STATION #10
2190 JEFFERSON
REDWOOD CITY, CA 94063

San Mateo Co. BI | **S113755647**
N/A

Click here for full text details

San Mateo Co. BI
Facility Id: FA0011296

6
North
< 1/8
0.023 mi.
124 ft.

Relative:
Lower

WEST BAY MOBILE AUTO TRUCK SVC
1135 HARRISON AVE
REDWOOD CITY, CA 94062

EDR Hist Auto | **1021288393**
N/A

Click here for full text details

7
East
< 1/8
0.123 mi.
648 ft.

Relative:
Lower

GLOBAL GARAGE LLC
1105 MADISON AVE
REDWOOD CITY, CA 94061

EDR Hist Auto | **1020274345**
N/A

Click here for full text details

8
NNW
1/8-1/4
0.208 mi.
1099 ft.

Relative:
Lower

PATRICIAN FINISHES
322 KING ST
REDWOOD CITY, CA 94062

RCRA-SQG | **1001959733**
CAR000060194

Click here for full text details

RCRA-SQG
EPA Id: CAR000060194

9
SW
1/4-1/2
0.393 mi.
2073 ft.

Relative:
Higher

JEFFERSON CHEVRON
3139 JEFFERSON AVE
REDWOOD CITY, CA 94061

LUST | **U001594477**
HIST UST | **N/A**

Click here for full text details

LUST
Facility Status: Pollution Characterization
Facility Status: 5C- Pollution Characterization
Status: Open - Verification Monitoring
Facility Id: 330179
Global Id: T0608189635
Global ID: T0608189635

Click here to access the California GeoTracker records for this facility

HIST UST

JEFFERSON CHEVRON (Continued) **U001594477**

Facility Id: 00000058986

C10
NNE
1/4-1/2
0.396 mi.
2091 ft.

Relative:
Lower

REDWOOD CITY SCHOOL DISTRICT **LUST** **U001594512**
601 JAMES AVE. **UST** **N/A**
REDWOOD CITY, CA 94062 **SWEEPS UST**
HIST UST

Click here for full text details

LUST
Facility Status: Case Closed
date9: 8/5/2002

UST
Facility Id: 41-000-330153

SWEEPS UST
Status: A
Tank Status: A
Comp Number: 330153

HIST UST
Facility Id: 00000056768

C11
NNE
1/4-1/2
0.396 mi.
2091 ft.

Relative:
Lower

REDWOOD CITY SCHOOL DISTR **LUST** **S104161767**
601 JAMES **HIST CORTESE** **N/A**
REDWOOD CITY, CA 94063

Click here for full text details

LUST
Facility Status: 9- Case Closed
Status: Completed - Case Closed
Facility Id: 330068
Global Id: T0608100420
Global ID: T0608100420

Click here to access the California GeoTracker records for this facility

HIST CORTESE
Reg Id: 41-0441

12
NNE
1/2-1
0.810 mi.
4278 ft.

Relative:
Lower

ROBISON PROPERTY
827 EL CAMINO REAL
REDWOOD CITY, CA 94063

ENVIROSTOR **S106131297**
SLIC **N/A**
VCP

Click here for full text details

ENVIROSTOR
Facility Id: 60001444
Status: Active

SLIC
Facility Status: Open - Site Assessment
Global Id: T0608127441

Click here to access the California GeoTracker records for this facility

VCP
Facility Id: 60001444
Status: Active

13
ENE
1/2-1
0.812 mi.
4287 ft.

Relative:
Lower

TOWNE FORD SALES
1601 EL CAMINO REAL
REDWOOD CITY, CA 94063

LUST **1000311542**
HIST UST **N/A**
Notify 65

Click here for full text details

LUST
Facility Status: Case Closed
Facility Status: 9- Case Closed
Status: Completed - Case Closed
Facility Id: 330023
Global Id: T0608100547
Global ID: T0608100547
date9: 10/12/1995

Click here to access the California GeoTracker records for this facility

HIST UST
Facility Id: 00000004128

14
ENE
1/2-1
0.893 mi.
4716 ft.

Relative:
Lower

FORMER DEMMA PARCELS
104 AND 112 CEDAR
REDWOOD CITY, CA 94063

ENVIROSTOR **S109422388**
N/A

Click here for full text details

ENVIROSTOR
Facility Id: 60001045
Status: Refer: 1248 Local Agency

15
North
1/2-1
0.924 mi.
4877 ft.

Relative:
Lower

ARTON MANAGEMENT/INVESTMENT COMPANY
570 EL CAMINO REAL
REDWOOD CITY, CA 94063

ENVIROSTOR **U001594591**
LUST **N/A**
HIST UST

Click here for full text details

ENVIROSTOR
Facility Id: 41550010
Status: Refer: Other Agency

LUST
Facility Status: 9- Case Closed
Status: Completed - Case Closed
Facility Id: 330066
Global Id: T0608101054
Global ID: T0608101054

Click here to access the California GeoTracker records for this facility

HIST UST
Facility Id: 00000009927

16
NE
1/2-1
0.940 mi.
4961 ft.

Relative:
Lower

COOKS AUTO BODY
1104 MAIN STREET
REDWOOD CITY, CA 94063

RCRA-SQG **1000272042**
ENVIROSTOR **CAD981457179**
LUST
FINDS
ECHO

Click here for full text details

RCRA-SQG
EPA Id: CAD981457179

ENVIROSTOR
Facility Id: 60001847
Status: Inactive - Action Required

LUST
Facility Status: Preliminary site assessment underway
Facility Status: 9- Case Closed
Status: Completed - Case Closed
Facility Id: 330188
Global Id: T0608183982
Global ID: T0608183982

Click here to access the California GeoTracker records for this facility

FINDS
Registry ID:: 110001168888

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
17 **West** **1/2-1** **0.996 mi.** **5260 ft.** **Relative:** **Higher**	**OAK KNOLL STATION** **590 CANYON ROAD** **REDWOOD CITY, CA 92257** **Click here for full text details**	**Notify 65**	**U000059129** **N/A**

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CA	AST	Aboveground Petroleum Storage Tank Facilities	California Environmental Protection Agency	07/06/2016	07/12/2016	09/19/2016
CA	BROWNFIELDS	Considered Brownfieds Sites Listing	State Water Resources Control Board	01/03/2017	01/04/2017	03/02/2017
CA	CA BOND EXP. PLAN	Bond Expenditure Plan	Department of Health Services	01/01/1989	07/27/1994	08/02/1994
CA	CA FID UST	Facility Inventory Database	California Environmental Protection Agency	10/31/1994	09/05/1995	09/29/1995
CA	CDL	Clandestine Drug Labs	Department of Toxic Substances Control	12/31/2016	03/17/2017	05/10/2017
CA	CHMIRS	California Hazardous Material Incident Report System	Office of Emergency Services	12/06/2016	01/25/2017	05/10/2017
CA	CORTESE	"Cortese" Hazardous Waste & Substances Sites List	CAL EPA/Office of Emergency Information	12/28/2016	12/28/2016	03/02/2017
CA	DEED	Deed Restriction Listing	DTSC and SWRCB	03/06/2017	03/07/2017	05/23/2017
CA	DRYCLEANERS	Cleaner Facilities	Department of Toxic Substance Control	03/09/2017	04/11/2017	05/23/2017
CA	EMI	Emissions Inventory Data	California Air Resources Board	12/31/2014	09/23/2016	10/24/2016
CA	ENF	Enforcement Action Listing	State Water Resoruces Control Board	01/23/2017	01/27/2017	05/25/2017
CA	ENVIROSTOR	EnviroStor Database	Department of Toxic Substances Control	01/30/2017	01/31/2017	05/23/2017
CA	Financial Assurance 1	Financial Assurance Information Listing	Department of Toxic Substances Control	04/25/2016	04/29/2016	06/21/2016
CA	Financial Assurance 2	Financial Assurance Information Listing	California Integrated Waste Management Board	02/14/2017	02/17/2017	05/25/2017
CA	HAULERS	Registered Waste Tire Haulers Listing	Integrated Waste Management Board	01/13/2017	01/17/2017	05/31/2017
CA	HAZNET	Facility and Manifest Data	California Environmental Protection Agency	12/31/2015	10/12/2016	12/15/2016
CA	HIST CAL-SITES	Calsites Database	Department of Toxic Substance Control	08/08/2005	08/03/2006	08/24/2006
CA	HIST CORTESE	Hazardous Waste & Substance Site List	Department of Toxic Substances Control	04/01/2001	01/22/2009	04/08/2009
CA	HIST UST	Hazardous Substance Storage Container Database	State Water Resources Control Board	10/15/1990	01/25/1991	02/12/1991
CA	HWP	EnviroStor Permitted Facilities Listing	Department of Toxic Substances Control	11/21/2016	11/22/2016	01/23/2017
CA	HWT	Registered Hazardous Waste Transporter Database	Department of Toxic Substances Control	04/11/2017	04/13/2017	04/26/2017
CA	ICE	ICE	Department of Toxic Subsances Control	11/21/2016	11/22/2016	01/23/2017
CA	LDS	Land Disposal Sites Listing (GEOTRACKER)	State Water Qualilty Control Board	03/13/2017	03/14/2017	05/02/2017
CA	LIENS	Environmental Liens Listing	Department of Toxic Substances Control	03/06/2017	03/07/2017	04/21/2017
CA	LUST	Leaking Underground Fuel Tank Report (GEOTRACKER)	State Water Resources Control Board	03/13/2017	03/14/2017	05/02/2017
CA	LUST REG 1	Active Toxic Site Investigation	California Regional Water Quality Control Boa	02/01/2001	02/28/2001	03/29/2001
CA	LUST REG 2	Fuel Leak List	California Regional Water Quality Control Boa	09/30/2004	10/20/2004	11/19/2004
CA	LUST REG 3	Leaking Underground Storage Tank Database	California Regional Water Quality Control Boa	05/19/2003	05/19/2003	06/02/2003
CA	LUST REG 4	Underground Storage Tank Leak List	California Regional Water Quality Control Boa	09/07/2004	09/07/2004	10/12/2004
CA	LUST REG 5	Leaking Underground Storage Tank Database	California Regional Water Quality Control Boa	07/01/2008	07/22/2008	07/31/2008
CA	LUST REG 6L	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	09/09/2003	09/10/2003	10/07/2003
CA	LUST REG 6V	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	06/07/2005	06/07/2005	06/29/2005
CA	LUST REG 7	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	02/26/2004	02/26/2004	03/24/2004
CA	LUST REG 8	Leaking Underground Storage Tanks	California Regional Water Quality Control Boa	02/14/2005	02/15/2005	03/28/2005
CA	LUST REG 9	Leaking Underground Storage Tank Report	California Regional Water Quality Control Boa	03/01/2001	04/23/2001	05/21/2001
CA	MCS	Military Cleanup Sites Listing (GEOTRACKER)	State Water Resources Control Board	03/13/2017	03/14/2017	05/02/2017
CA	MINES	Mines Site Location Listing	Department of Conservation	09/12/2016	09/14/2016	10/14/2016
CA	MWMP	Medical Waste Management Program Listing	Department of Public Health	12/02/2016	12/06/2016	03/02/2017
CA	NOTIFY 65	Proposition 65 Records	State Water Resources Control Board	12/16/2016	12/22/2016	03/02/2017
CA	NPDES	NPDES Permits Listing	State Water Resources Control Board	11/14/2016	11/15/2016	03/02/2017
CA	PEST LIC	Pesticide Regulation Licenses Listing	Department of Pesticide Regulation	12/06/2016	12/06/2016	03/03/2017
CA	PROC	Certified Processors Database	Department of Conservation	03/13/2017	03/14/2017	05/03/2017
CA	RESPONSE	State Response Sites	Department of Toxic Substances Control	01/30/2017	01/31/2017	05/23/2017
CA	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Resources Recycling and Recover		07/01/2013	01/13/2014
CA	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	State Water Resources Control Board		07/01/2013	12/30/2013
CA	SCH	School Property Evaluation Program	Department of Toxic Substances Control	01/30/2017	01/31/2017	05/23/2017
CA	SLIC	Statewide SLIC Cases (GEOTRACKER)	State Water Resources Control Board	03/13/2017	03/14/2017	05/02/2017

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CA	SLIC REG 1	Active Toxic Site Investigations	California Regional Water Quality Control Boa	04/03/2003	04/07/2003	04/25/2003
CA	SLIC REG 2	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board San Fran	09/30/2004	10/20/2004	11/19/2004
CA	SLIC REG 3	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Regional Water Quality Control Boa	05/18/2006	05/18/2006	06/15/2006
CA	SLIC REG 4	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Region Water Quality Control Board Los Angele	11/17/2004	11/18/2004	01/04/2005
CA	SLIC REG 5	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board Central	04/01/2005	04/05/2005	04/21/2005
CA	SLIC REG 6L	SLIC Sites	California Regional Water Quality Control Boa	09/07/2004	09/07/2004	10/12/2004
CA	SLIC REG 6V	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board, Victorv	05/24/2005	05/25/2005	06/16/2005
CA	SLIC REG 7	SLIC List	California Regional Quality Control Board, Co	11/24/2004	11/29/2004	01/04/2005
CA	SLIC REG 8	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Region Water Quality Control Board	04/03/2008	04/03/2008	04/14/2008
CA	SLIC REG 9	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Regional Water Quality Control Boa	09/10/2007	09/11/2007	09/28/2007
CA	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	06/06/2012	01/03/2013	02/22/2013
CA	SWEEPS UST	SWEEPS UST Listing	State Water Resources Control Board	06/01/1994	07/07/2005	08/11/2005
CA	SWF/LF (SWIS)	Solid Waste Information System	Department of Resources Recycling and Recover	02/13/2017	02/15/2017	05/02/2017
CA	SWRCY	Recycler Database	Department of Conservation	03/13/2017	03/14/2017	05/03/2017
CA	TOXIC PITS	Toxic Pits Cleanup Act Sites	State Water Resources Control Board	07/01/1995	08/30/1995	09/26/1995
CA	UIC	UIC Listing	Deaprtment of Conservation	01/20/2017	03/14/2017	05/03/2017
CA	UST	Active UST Facilities	SWRCB	03/12/2017	03/16/2017	05/12/2017
CA	UST MENDOCINO	Mendocino County UST Database	Department of Public Health	03/09/2017	03/17/2017	05/23/2017
CA	VCP	Voluntary Cleanup Program Properties	Department of Toxic Substances Control	01/30/2017	01/31/2017	05/23/2017
CA	WASTEWATER PITS	Oil Wastewater Pits Listing	RWQCB, Central Valley Region	04/15/2015	04/17/2015	06/23/2015
CA	WDS	Waste Discharge System	State Water Resources Control Board	06/19/2007	06/20/2007	06/29/2007
CA	WIP	Well Investigation Program Case List	Los Angeles Water Quality Control Board	07/03/2009	07/21/2009	08/03/2009
CA	WMUDS/SWAT	Waste Management Unit Database	State Water Resources Control Board	04/01/2000	04/10/2000	05/10/2000
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	04/22/2013	03/03/2015	03/09/2015
US	ABANDONED MINES	Abandoned Mines	Department of Interior	03/14/2017	03/17/2017	04/07/2017
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2013	02/24/2015	09/30/2015
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	09/30/2016	11/18/2016	02/03/2017
US	CORRACTS	Corrective Action Report	EPA	12/12/2016	12/28/2016	02/10/2017
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DOCKET HWC	Hazardous Waste Compliance Docket Listing	Environmental Protection Agency	06/02/2016	06/03/2016	09/02/2016
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	Delisted NPL	National Priority List Deletions	EPA	04/05/2017	04/21/2017	05/12/2017
US	ECHO	Enforcement & Compliance History Information	Environmental Protection Agency	03/19/2017	03/21/2017	05/12/2017
US	EDR Hist Auto	EDR Exclusive Historic Gas Stations	EDR, Inc.			
US	EDR Hist Cleaner	EDR Exclusive Historic Dry Cleaners	EDR, Inc.			
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	09/26/2016	09/29/2016	11/11/2016
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	11/07/2016	01/05/2017	04/07/2017
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/01/2010	02/16/2010	04/12/2010
US	FINDS	Facility Index System/Facility Registry System	EPA	04/04/2017	04/07/2017	05/12/2017
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	01/31/2015	07/08/2015	10/13/2015
US	FUELS PROGRAM	EPA Fuels Program Registered Listing	EPA	02/22/2017	02/22/2017	05/12/2017
US	FUSRAP	Formerly Utilized Sites Remedial Action Program	Department of Energy	12/23/2016	12/27/2016	02/17/2017
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	12/28/2016	12/28/2016	02/03/2017
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	11/18/2016	11/23/2016	02/10/2017
US	IHS OPEN DUMPS	Open Dumps on Indian Land	Department of Health & Human Serivces, Indian	04/01/2014	08/06/2014	01/29/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	11/14/2016	01/26/2017	05/05/2017
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	10/07/2016	01/26/2017	05/05/2017
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	10/14/2016	01/27/2017	05/05/2017
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	11/14/2016	01/26/2017	05/05/2017
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	10/01/2016	01/26/2017	05/05/2017
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	09/01/2016	01/26/2017	05/05/2017
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	10/17/2016	01/26/2017	05/05/2017
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	10/06/2016	01/26/2017	05/05/2017
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2014	07/14/2015	01/10/2017
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	11/14/2016	01/26/2017	05/05/2017
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	10/07/2016	01/26/2017	05/05/2017
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	10/14/2016	01/27/2017	05/05/2017
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	01/14/2017	01/26/2017	05/05/2017
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	10/01/2016	01/26/2017	05/05/2017
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	09/01/2016	01/26/2017	05/05/2017
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	10/17/2016	01/26/2017	05/05/2017
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	10/06/2016	01/26/2017	05/05/2017
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	07/27/2015	09/29/2015	02/18/2016
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	12/05/2016	01/05/2017	02/10/2017
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	02/18/2014	03/18/2014	04/24/2014
US	LUCIS	Land Use Control Information System	Department of the Navy	12/28/2016	01/04/2017	04/07/2017
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	08/30/2016	09/08/2016	10/21/2016
US	NPL	National Priority List	EPA	04/05/2017	04/21/2017	05/12/2017
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	01/20/2016	04/28/2016	09/02/2016
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	02/01/2011	10/19/2011	01/10/2012
US	PRP	Potentially Responsible Parties	EPA	10/25/2013	10/17/2014	10/20/2014
US	Proposed NPL	Proposed National Priority List Sites	EPA	04/05/2017	04/21/2017	05/12/2017
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	01/04/2017	01/06/2017	02/10/2017
US	RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated	Environmental Protection Agency	12/12/2016	12/28/2016	02/10/2017
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	12/12/2016	12/28/2016	02/10/2017
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	12/12/2016	12/28/2016	02/10/2017
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	12/12/2016	12/28/2016	02/10/2017
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	12/12/2016	12/28/2016	02/10/2017

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	RMP	Risk Management Plans	Environmental Protection Agency	02/01/2017	02/09/2017	04/07/2017
US	ROD	Records Of Decision	EPA	11/25/2013	12/12/2013	02/24/2014
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	01/01/2017	02/03/2017	04/07/2017
US	SEMS	Superfund Enterprise Management System	EPA	02/07/2017	04/19/2017	05/05/2017
US	SEMS-ARCHIVE	Superfund Enterprise Management System Archive	EPA	02/07/2017	04/19/2017	05/05/2017
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2014	11/24/2015	04/05/2016
US	TSCA	Toxic Substances Control Act	EPA	12/31/2012	01/15/2015	01/29/2015
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	09/14/2010	10/07/2011	03/01/2012
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/12/2016	10/26/2016	02/03/2017
US	US AIRS MINOR	Air Facility System Data	EPA	10/12/2016	10/26/2016	02/03/2017
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	03/02/2017	03/02/2017	04/07/2017
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	09/30/2016	12/05/2016	02/10/2017
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	11/15/2016	11/29/2016	02/03/2017
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	02/13/2017	02/15/2017	05/12/2017
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	09/30/2016	01/05/2017	02/10/2017
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	11/15/2016	11/29/2016	02/03/2017
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	02/08/2017	02/28/2017	04/07/2017
US	US MINES 2	Ferrous and Nonferrous Metal Mines Database Listing	USGS	12/05/2005	02/29/2008	04/18/2008
US	US MINES 3	Active Mines & Mineral Plants Database Listing	USGS	04/14/2011	06/08/2011	09/13/2011
US	UXO	Unexploded Ordnance Sites	Department of Defense	10/25/2015	01/29/2016	04/05/2016
CT	CT MANIFEST	Hazardous Waste Manifest Data	Department of Energy & Environmental Protecti	07/30/2013	08/19/2013	10/03/2013
NJ	NJ MANIFEST	Manifest Information	Department of Environmental Protection	12/31/2015	09/29/2016	01/03/2017
NY	NY MANIFEST	Facility and Manifest Data	Department of Environmental Conservation	01/30/2017	02/01/2017	02/13/2017
PA	PA MANIFEST	Manifest Information	Department of Environmental Protection	12/31/2015	07/22/2016	11/22/2016
RI	RI MANIFEST	Manifest information	Department of Environmental Management	12/31/2013	06/19/2015	07/15/2015
WI	WI MANIFEST	Manifest Information	Department of Natural Resources	12/31/2015	04/14/2016	06/03/2016

Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data

Source: PennWell Corporation

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GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
CA	Daycare Centers	Sensitive Receptor: Licensed Facilities	Department of Social Services			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
CA	State Wetlands	Wetland Inventory	Department of Fish & Game			
US	Topographic Map		U.S. Geological Survey			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

JOHN GILL ELEMENTARY SCHOOL
555 AVENUE DEL ORA
REDWOOD CITY, CA 94062

TARGET PROPERTY COORDINATES

Latitude (North):	37.47439 - 37° 28' 27.80''
Longitude (West):	122.240558 - 122° 14' 26.01''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	567152.2
UTM Y (Meters):	4147566.5
Elevation:	59 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5640620 PALO ALTO, CA
Version Date:	2012
Southwest Map:	5640628 WOODSIDE, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

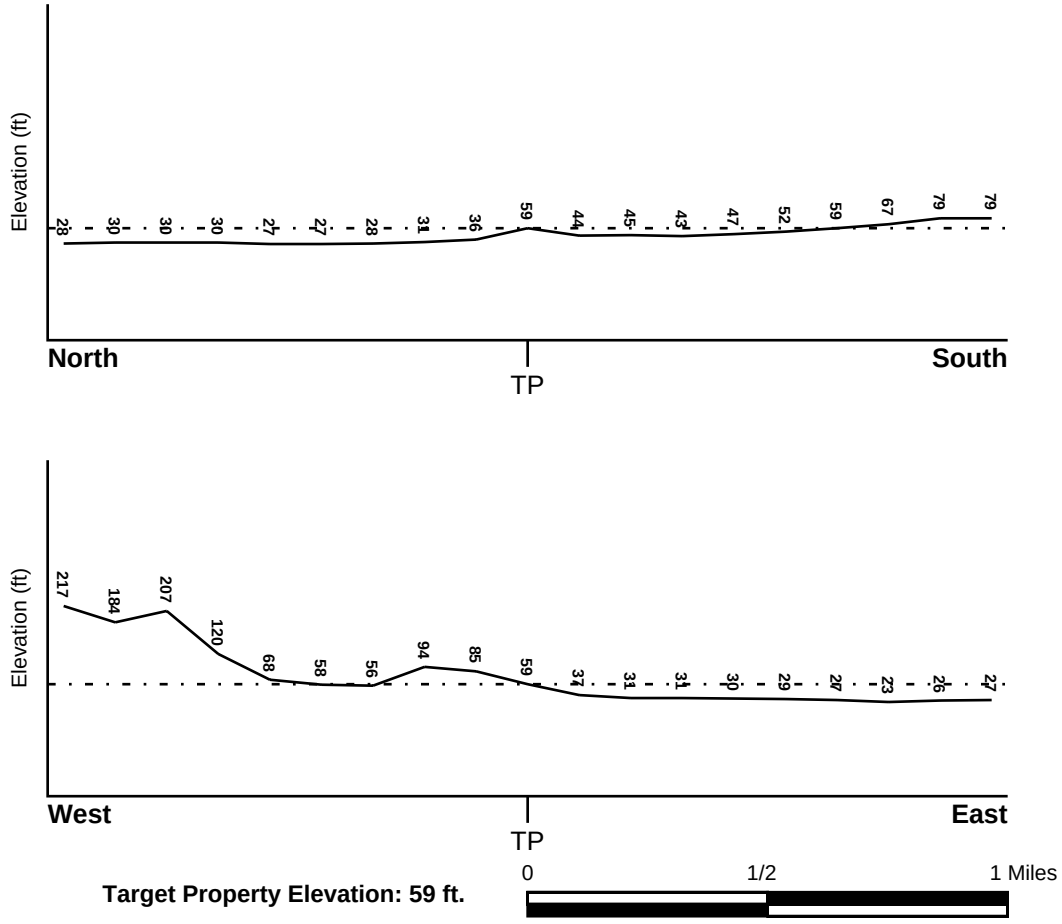
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General ENE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Target Property Elevation: 59 ft.

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06081C0301E	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06081C0282E	FEMA FIRM Flood data
06081C0285E	FEMA FIRM Flood data
06081C0303E	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
PALO ALTO	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
A1	1/4 - 1/2 Mile NNE	NNE
A2	1/2 - 1 Mile NNE	E
B3	1/2 - 1 Mile SE	NE
B4	1/2 - 1 Mile SE	N
5	1/2 - 1 Mile WNW	NE
C6	1/2 - 1 Mile NE	NE

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
D7	1/2 - 1 Mile NE	NNE
C8	1/2 - 1 Mile NE	NE
C9	1/2 - 1 Mile NE	N
D10	1/2 - 1 Mile NE	NE
11	1/2 - 1 Mile ENE	N
E12	1/2 - 1 Mile NE	N
13	1/2 - 1 Mile NNE	SE
14	1/2 - 1 Mile NNW	Not Reported
F15	1/2 - 1 Mile ENE	Not Reported
F16	1/2 - 1 Mile ENE	Not Reported
F17	1/2 - 1 Mile ENE	NE
F18	1/2 - 1 Mile ENE	NNE
E19	1/2 - 1 Mile NE	NE
E20	1/2 - 1 Mile NE	NE
G21	1/2 - 1 Mile NNE	E
G22	1/2 - 1 Mile NNE	NE
H23	1/2 - 1 Mile NE	NW
H24	1/2 - 1 Mile NE	NE
25	1/2 - 1 Mile NE	NE
27	1/2 - 1 Mile North	Varies

For additional site information, refer to Physical Setting Source Map Findings.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

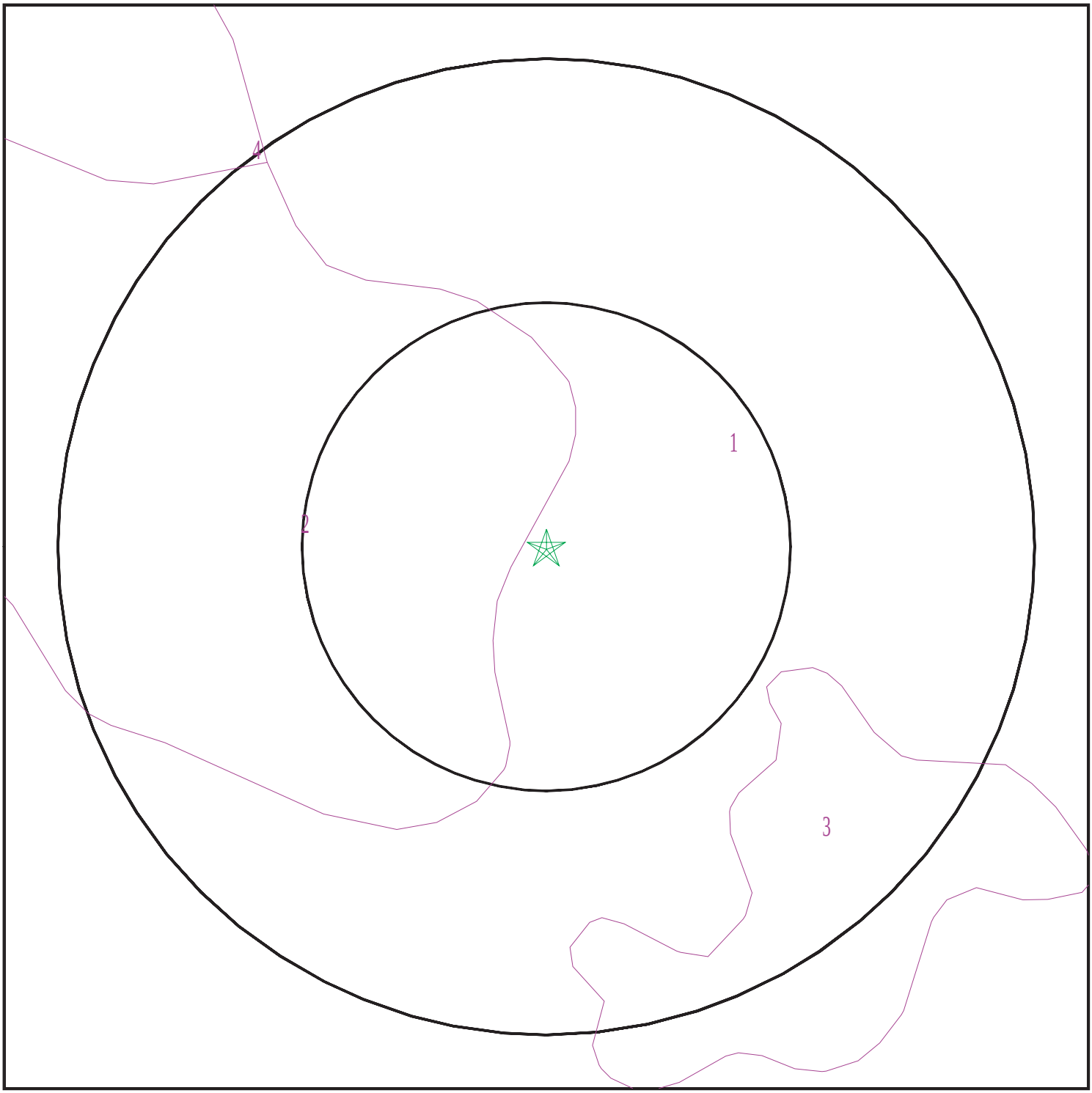
Era:	Paleozoic
System:	Permian
Series:	Ultramafic rocks
Code:	uM *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Plutonic and Intrusive Rocks

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4955887.16s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	John Gill Elementary School	CLIENT:	McCloskey Consultants Inc
ADDRESS:	555 Avenue Del Ora Redwood City CA 94062	CONTACT:	Tom Mccloskey
		INQUIRY #:	4955887.16s
LAT/LONG:	37.47439 / 122.240558	DATE:	June 05, 2017 10:14 am

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Urban land

Soil Surface Texture:
Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class:
Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches		Not reported	Not reported	Max: 0.01 Min: 0	Max: Min:

Soil Map ID: 2

Soil Component Name: Orthents

Soil Surface Texture:
Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	59 inches		Not reported	Not reported	Max: Min:	Max: Min:

Soil Map ID: 3

Soil Component Name: Orthents

Soil Surface Texture: variable

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	59 inches	variable	Not reported	Not reported	Max: Min:	Max: Min:

Soil Map ID: 4

Soil Component Name: Orthents

Soil Surface Texture:

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	59 inches		Not reported	Not reported	Max: Min:	Max: Min:

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 0.001 miles
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

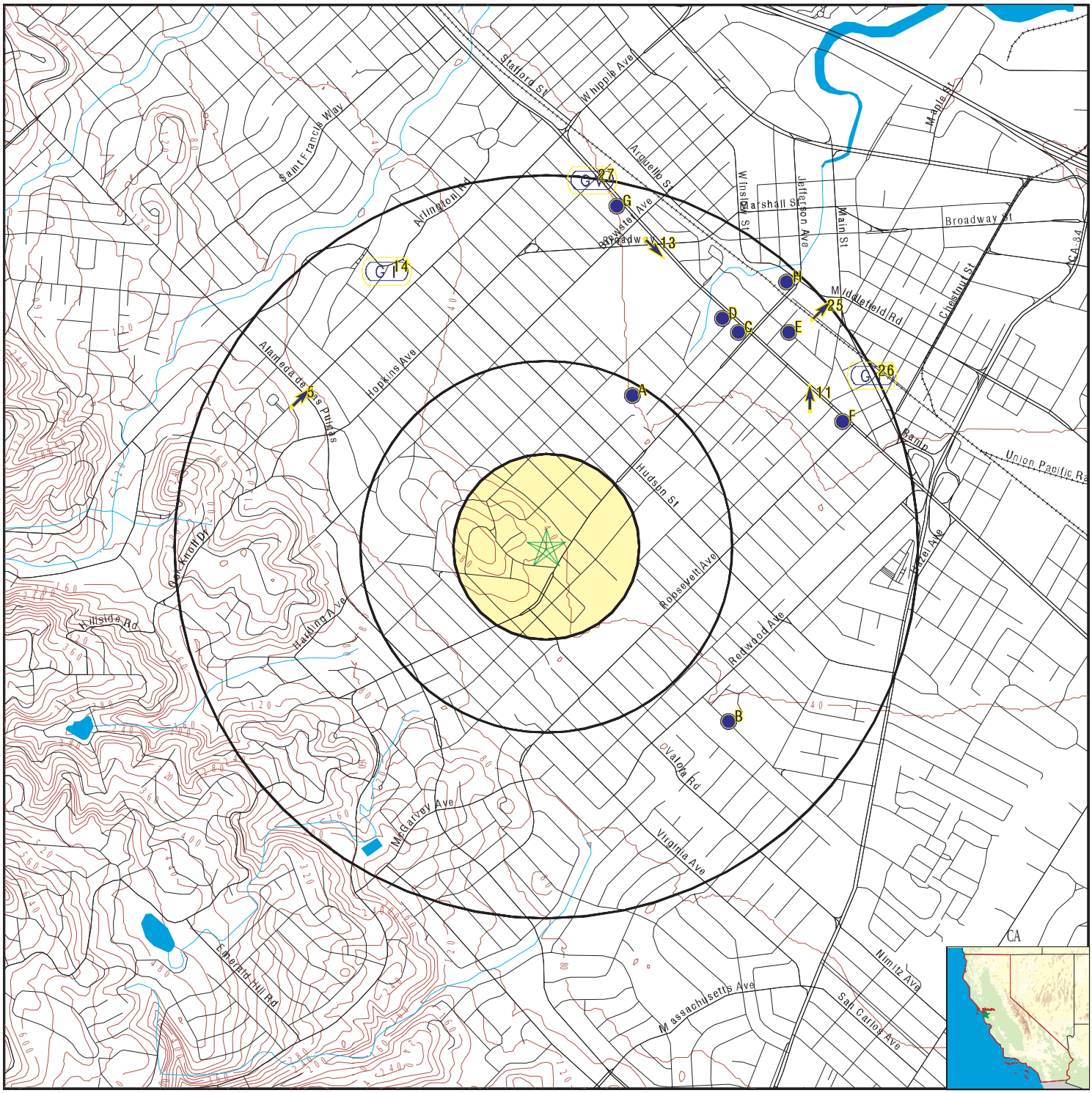
MAP ID	WELL ID	LOCATION FROM TP

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

PHYSICAL SETTING SOURCE MAP - 4955887.16s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME: John Gill Elementary School	CLIENT: McCloskey Consultants Inc
ADDRESS: 555 Avenue Del Ora Redwood City CA 94062	CONTACT: Tom Mccloskey
LAT/LONG: 37.47439 / 122.240558	INQUIRY #: 4955887.16s DATE: June 05, 2017 10:14 am

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
A1 **NNE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**67069**
A2 **NNE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**67049**
B3 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**65874**
B4 **SE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**66746**
5 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**AQUIFLOW**	**65501**
C6 **NE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**65739**
D7 **NE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**66559**
C8 **NE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**66727**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
C9 **NE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**66731**
D10 **NE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**66135**
11 **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**66761**
E12 **NE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**66566**
13 **NNE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**67077**
14 **NNW** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**67086**
F15 **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**66585**
F16 **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**66582**
F17 **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**65591**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
F18 **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**67018**
E19 **NE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**65732**
E20 **NE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**65733**
G21 **NNE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**67066**
G22 **NNE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**67073**
H23 **NE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**66052**
H24 **NE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**67090**
25 **NE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**65717**
26 **ENE** **1/2 - 1 Mile** **Lower**	Click here for full text details	**AQUIFLOW**	**66743**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
27 **North** **1/2 - 1 Mile** **Lower**	**Click here for full text details**	**AQUIFLOW**	**65983**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
94062	119	27

Federal EPA Radon Zone for SAN MATEO County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 94062

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	2.000 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish & Game
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779
Oil and Gas well locations in the state.

RADON

State Database: CA Radon
Source: Department of Health Services
Telephone: 916-324-2208
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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John Gill Elementary School
555 Avenue Del Ora
Redwood City, CA 94062

Inquiry Number: 4955887.16s
June 05, 2017

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

555 AVENUE DEL ORA
REDWOOD CITY, CA 94062

COORDINATES

Latitude (North):	37.4743900 - 37° 28' 27.80''
Longitude (West):	122.2405580 - 122° 14' 26.00''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	567152.2
UTM Y (Meters):	4147566.5
Elevation:	59 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5640620 PALO ALTO, CA
Version Date:	2012
Southwest Map:	5640628 WOODSIDE, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140608
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
555 AVENUE DEL ORA
REDWOOD CITY, CA 94062

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	REDWOOD CITY SD-JOHN	555 AVENUE DEL ORA	HAZNET		TP
A2	REDWOOD CITY SCHOOL	555 AVENUE DE ORA	RCRA-SQG, FINDS, ECHO, HAZNET		TP
A3	REDWOOD CITY SD-JOHN	555 AVENUE DEL ORA	HAZNET		TP
B4	CITY OF REDWOOD CITY	2190 JEFFERSON	SWEEPS UST	Lower	112, 0.021, ENE
B5	FIRE STATION #10	2190 JEFFERSON	San Mateo Co. BI	Lower	112, 0.021, ENE
6	WEST BAY MOBILE AUTO	1135 HARRISON AVE	EDR Hist Auto	Lower	124, 0.023, North
7	GLOBAL GARAGE LLC	1105 MADISON AVE	EDR Hist Auto	Lower	648, 0.123, East
8	PATRICIAN FINISHES	322 KING ST	RCRA-SQG	Lower	1099, 0.208, NNW
9	JEFFERSON CHEVRON	3139 JEFFERSON AVE	LUST, HIST UST	Higher	2073, 0.393, SW
C10	REDWOOD CITY SCHOOL	601 JAMES AVE.	LUST, UST, SWEEPS UST, HIST UST	Lower	2091, 0.396, NNE
C11	REDWOOD CITY SCHOOL	601 JAMES	LUST, HIST CORTESE	Lower	2091, 0.396, NNE
12	ROBISON PROPERTY	827 EL CAMINO REAL	ENVIROSTOR, SLIC, VCP	Lower	4278, 0.810, NNE
13	TOWNE FORD SALES	1601 EL CAMINO REAL	LUST, HIST UST, Notify 65	Lower	4287, 0.812, ENE
14	FORMER DEMMA PARCELS	104 AND 112 CEDAR	ENVIROSTOR	Lower	4716, 0.893, ENE
15	ARTON MANAGEMENT/INV	570 EL CAMINO REAL	ENVIROSTOR, LUST, HIST UST	Lower	4877, 0.924, North
16	COOKS AUTO BODY	1104 MAIN STREET	RCRA-SQG, ENVIROSTOR, LUST, FINDS, ECHO	Lower	4961, 0.940, NE
17	OAK KNOLL STATION	590 CANYON ROAD	Notify 65	Higher	5260, 0.996, West

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
REDWOOD CITY SD-JOHN 555 AVENUE DEL ORA REDWOOD CITY, CA 94062	HAZNET GEPAID: CAC002604890	N/A
REDWOOD CITY SCHOOL 555 AVENUE DE ORA REDWOOD CITY, CA 94062	RCRA-SQG EPA ID:: CAD981162894 FINDS Registry ID:: 110002679290 ECHO HAZNET GEPAID: CAD981162894	CAD981162894
REDWOOD CITY SD-JOHN 555 AVENUE DEL ORA REDWOOD CITY, CA 94062	HAZNET GEPAID: CAC002579747	N/A

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

EXECUTIVE SUMMARY

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS ---------- Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG ---------- RCRA - Large Quantity Generators
RCRA-CESQG ---------- RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System
US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROL ---------- Sites with Institutional Controls

Federal ERNS list

ERNS ---------- Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE ---------- State Response Sites

State and tribal landfill and/or solid waste disposal site lists

SWF/LF ---------- Solid Waste Information System

State and tribal leaking storage tank lists

INDIAN LUST ---------- Leaking Underground Storage Tanks on Indian Land
SLIC ---------- Statewide SLIC Cases

State and tribal registered storage tank lists

FEMA UST ---------- Underground Storage Tank Listing
UST ---------- Active UST Facilities
AST ---------- Aboveground Petroleum Storage Tank Facilities
INDIAN UST ---------- Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

VCP ---------- Voluntary Cleanup Program Properties
INDIAN VCP ---------- Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS ---------- Considered Brownfieds Sites Listing

EXECUTIVE SUMMARY

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT ..... Waste Management Unit Database
SWRCY ..... Recycler Database
HAULERS ..... Registered Waste Tire Haulers Listing
INDIAN ODI ..... Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9 ..... Torres Martinez Reservation Illegal Dump Site Locations
ODI ..... Open Dump Inventory
IHS OPEN DUMPS ..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ..... Delisted National Clandestine Laboratory Register
HIST Cal-Sites ..... Historical Calsites Database
SCH ..... School Property Evaluation Program
CDL ..... Clandestine Drug Labs
Toxic Pits ..... Toxic Pits Cleanup Act Sites
US CDL ..... National Clandestine Laboratory Register

Local Lists of Registered Storage Tanks

HIST UST ..... Hazardous Substance Storage Container Database
CA FID UST ..... Facility Inventory Database

Local Land Records

LIENS ..... Environmental Liens Listing
LIENS 2 ..... CERCLA Lien Information
DEED ..... Deed Restriction Listing

Records of Emergency Release Reports

HMIRS ..... Hazardous Materials Information Reporting System
CHMIRS ..... California Hazardous Material Incident Report System
LDS ..... Land Disposal Sites Listing
MCS ..... Military Cleanup Sites Listing
SPILLS 90 ..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR ..... RCRA - Non Generators / No Longer Regulated
FUDS ..... Formerly Used Defense Sites
DOD ..... Department of Defense Sites
SCRD DRYCLEANERS ..... State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR ..... Financial Assurance Information
EPA WATCH LIST ..... EPA WATCH LIST
2020 COR ACTION ..... 2020 Corrective Action Program List

EXECUTIVE SUMMARY

TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
ROD	Records Of Decision
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
ICIS	Integrated Compliance Information System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
CONSENT	Superfund (CERCLA) Consent Decrees
INDIAN RESERV	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem
US MINES	Mines Master Index File
ABANDONED MINES	Abandoned Mines
UXO	Unexploded Ordnance Sites
DOCKET HWC	Hazardous Waste Compliance Docket Listing
FUELS PROGRAM	EPA Fuels Program Registered Listing
CA BOND EXP. PLAN	Bond Expenditure Plan
Cortese	"Cortese" Hazardous Waste & Substances Sites List
CUPA Listings	CUPA Resources List
DRYCLEANERS	Cleaner Facilities
EMI	Emissions Inventory Data
ENF	Enforcement Action Listing
Financial Assurance	Financial Assurance Information Listing
ICE	ICE
HWP	EnviroStor Permitted Facilities Listing
HWT	Registered Hazardous Waste Transporter Database
MINES	Mines Site Location Listing
MWMP	Medical Waste Management Program Listing
NPDES	NPDES Permits Listing
PEST LIC	Pesticide Regulation Licenses Listing
PROC	Certified Processors Database
UIC	UIC Listing
WASTEWATER PITS	Oil Wastewater Pits Listing
WDS	Waste Discharge System
WIP	Well Investigation Program Case List

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	EDR Proprietary Manufactured Gas Plants

EXECUTIVE SUMMARY

EDR Hist Cleaner..... EDR Exclusive Historic Dry Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF..... Recovered Government Archive Solid Waste Facilities List
RGA LUST..... Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA generators list

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 12/12/2016 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
PATRICIAN FINISHES	322 KING ST	NNW 1/8 - 1/4 (0.208 mi.)	8	12

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk

characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 01/30/2017 has revealed that there are 4 ENVIROSTOR sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ROBISON PROPERTY	***827 EL CAMINO REAL***	***NNE 1/2 - 1 (0.810 mi.)***	***12***	***32***
Facility Id: 60001444				
Status: Active				
FORMER DEMMA PARCELS	104 AND 112 CEDAR	ENE 1/2 - 1 (0.893 mi.)	14	36
Facility Id: 60001045				
Status: Refer: 1248 Local Agency				
ARTON MANAGEMENT/INV	***570 EL CAMINO REAL***	***N 1/2 - 1 (0.924 mi.)***	***15***	***37***
Facility Id: 41550010				
Status: Refer: Other Agency				
COOKS AUTO BODY	***1104 MAIN STREET***	***NE 1/2 - 1 (0.940 mi.)***	***16***	***40***
Facility Id: 60001847				
Status: Inactive - Action Required				

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 3 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
JEFFERSON CHEVRON	***3139 JEFFERSON AVE***	***SW 1/4 - 1/2 (0.393 mi.)***	***9***	***13***
Database: LUST REG 2, Date of Government Version: 09/30/2004				
Database: SAN MATEO CO. LUST, Date of Government Version: 03/15/2017				
Database: LUST, Date of Government Version: 03/13/2017				
Status: Open - Verification Monitoring				
Facility Status: Pollution Characterization				
Facility Id: 330179				
Facility Status: 5C- Pollution Characterization				
Global Id: T0608189635				
Global ID: T0608189635				

Lower Elevation	Address	Direction / Distance	Map ID	Page
REDWOOD CITY SCHOOL	***601 JAMES AVE.***	***NNE 1/4 - 1/2 (0.396 mi.)***	***C10***	***28***
Database: LUST REG 2, Date of Government Version: 09/30/2004				
Facility Status: Case Closed				
date9: 8/5/2002				
REDWOOD CITY SCHOOL	***601 JAMES***	***NNE 1/4 - 1/2 (0.396 mi.)***	***C11***	***30***
Database: SAN MATEO CO. LUST, Date of Government Version: 03/15/2017				
Database: LUST, Date of Government Version: 03/13/2017				
Status: Completed - Case Closed				

Facility Id: 330068
Facility Status: 9- Case Closed
Global Id: T0608100420
Global ID: T0608100420

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Registered Storage Tanks

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there is 1 SWEEPS UST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CITY OF REDWOOD CITY Status: A Comp Number: 330169	2190 JEFFERSON	ENE 0 - 1/8 (0.021 mi.)	B4	11

Other Ascertainable Records

Hazardous Materials Business Plan, Hazardous Waste Generator, Underground Storage tanks

A review of the San Mateo Co. BI list, as provided by EDR, and dated 03/15/2017 has revealed that there is 1 San Mateo Co. BI site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
FIRE STATION #10 Facility Id: FA0011296	2190 JEFFERSON	ENE 0 - 1/8 (0.021 mi.)	B5	11

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there is 1 HIST CORTESE site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
REDWOOD CITY SCHOOL Reg Id: 41-0441	***601 JAMES***	***NNE 1/4 - 1/2 (0.396 mi.)***	***C11***	***30***

Notify 65: Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

A review of the Notify 65 list, as provided by EDR, and dated 12/16/2016 has revealed that there are 2 Notify 65 sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
OAK KNOLL STATION	590 CANYON ROAD	W 1/2 - 1 (0.996 mi.)	17	55
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
TOWNE FORD SALES	***1601 EL CAMINO REAL***	***ENE 1/2 - 1 (0.812 mi.)***	***13***	***34***

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there are 2 EDR Hist Auto sites within approximately 0.125 miles of the target property.

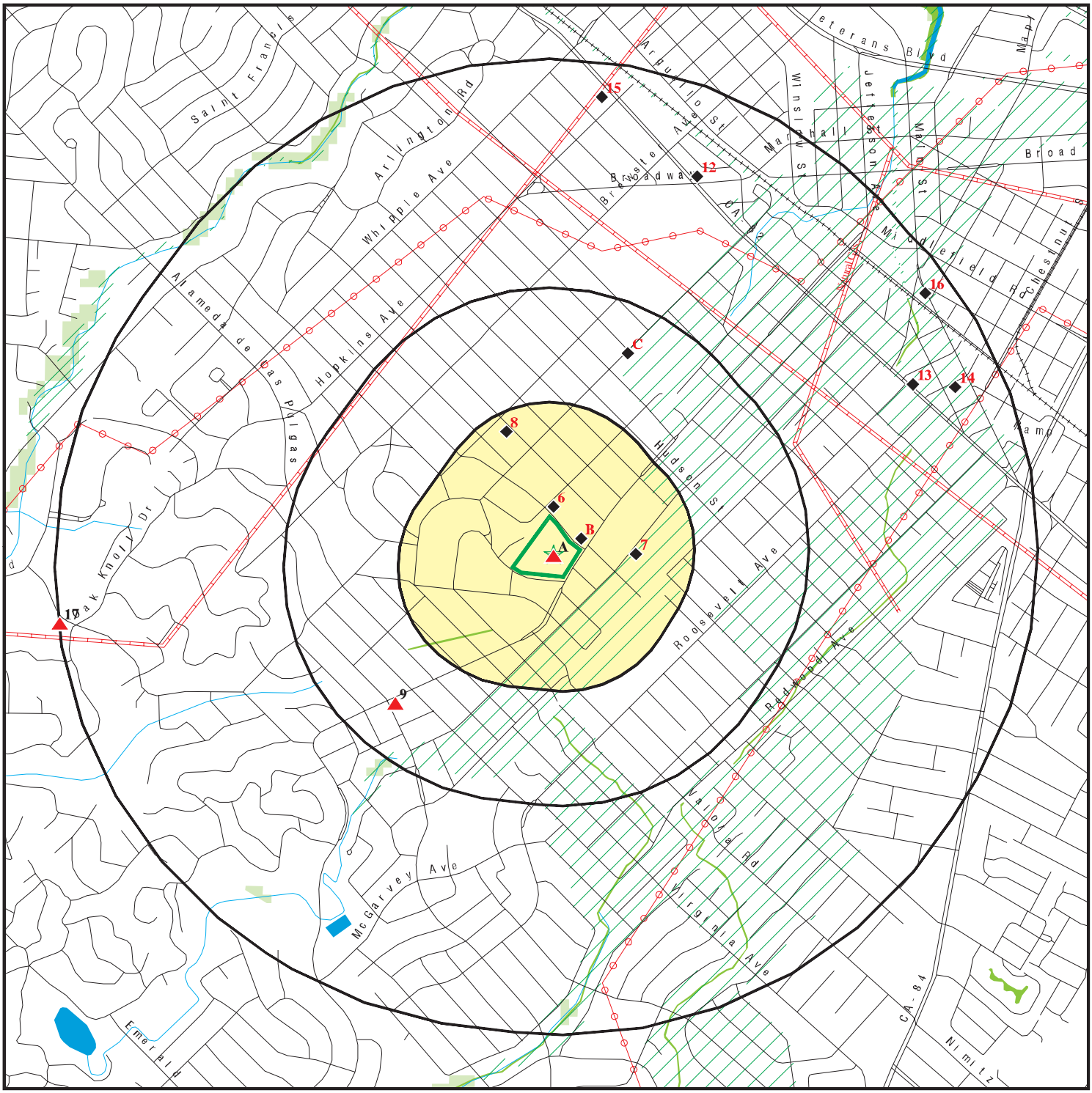
Lower Elevation	Address	Direction / Distance	Map ID	Page
WEST BAY MOBILE AUTO	1135 HARRISON AVE	N 0 - 1/8 (0.023 mi.)	6	12
GLOBAL GARAGE LLC	1105 MADISON AVE	E 0 - 1/8 (0.123 mi.)	7	12

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 2 records.

Site Name	Database(s)
SEQUOIA ALTERNATIVE SCHOOL	ENVIROSTOR, SCH
SEQUOIA STATION SHOPPING CENTER	ENVIROSTOR

OVERVIEW MAP - 4955887.16S



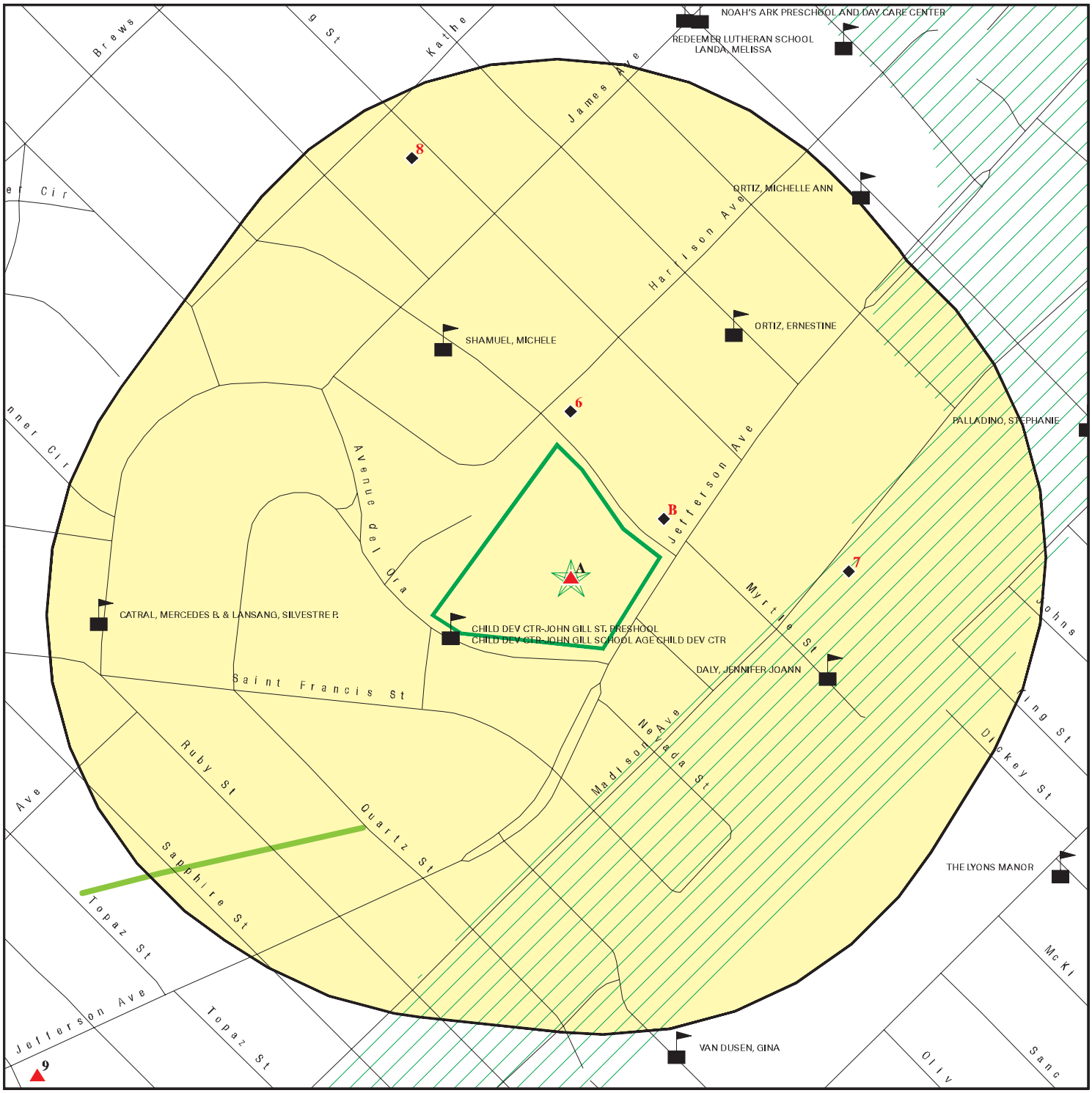
- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Pipelines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: John Gill Elementary School ADDRESS: 555 Avenue Del Ora Redwood City CA 94062 LAT/LONG: 37.47439 / 122.240558	CLIENT: McCloskey Consultants Inc CONTACT: Tom Mccloskey INQUIRY #: 4955887.16s DATE: June 05, 2017 10:10 am

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DETAIL MAP - 4955887.16S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

0 1/16 1/8 1/4 Miles

Indian Reservations BIA

100-year flood zone

500-year flood zone

National Wetland Inventory

State Wetlands

Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: John Gill Elementary School	CLIENT: McCloskey Consultants Inc
ADDRESS: 555 Avenue Del Ora Redwood City CA 94062	CONTACT: Tom Mccloskey
LAT/LONG: 37.47439 / 122.240558	INQUIRY #: 4955887.16s DATE: June 05, 2017 10:13 am

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	0.001		0	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250	1	0	1	NR	NR	NR	2
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		0	0	0	4	NR	4
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	0	3	NR	NR	3

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
SLIC	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		1	0	NR	NR	NR	1
HIST UST	0.250		0	0	NR	NR	NR	0
CA FID UST	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	0.001		0	NR	NR	NR	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.001		0	NR	NR	NR	NR	0
FINDS	0.001	1	0	NR	NR	NR	NR	1
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
ECHO	0.001	1	0	NR	NR	NR	NR	1
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
San Mateo Co. BI	0.250		1	0	NR	NR	NR	1
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	0.001		0	NR	NR	NR	NR	0
ENF	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
HAZNET	0.001	3	0	NR	NR	NR	NR	3
ICE	0.001		0	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	0	1	NR	NR	1
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.001		0	NR	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
PEST LIC	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	2	NR	2
UIC	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001		0	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		2	NR	NR	NR	NR	2
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		6	4	1	4	6	0	21

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 **REDWOOD CITY SD-JOHN GILL ELEMENTARY** **HAZNET** **S112954270**
Target Property **555 AVENUE DEL ORA** **N/A**
REDWOOD CITY, CA 94062

Site 1 of 3 in cluster A

Actual: 59 ft.

HAZNET:

envid:	S112954270
Year:	2006
GEPAID:	CAC002604890
Contact:	LEE CHANDLER
Telephone:	6505692374
Mailing Name:	Not reported
Mailing Address:	601 JAMES AVE
Mailing City,St,Zip:	REDWOOD CITY, CA 94062
Gen County:	Not reported
TSD EPA ID:	CAD028409019
TSD County:	Not reported
Waste Category:	Asbestos containing waste
Disposal Method:	Transfer Station
Tons:	0.21
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	San Mateo

A2 **REDWOOD CITY SCHOOL DIST** **RCRA-SQG** **1000438508**
Target Property **555 AVENUE DE ORA** **FINDS** **CAD981162894**
REDWOOD CITY, CA 94062 **ECHO**
HAZNET

Site 2 of 3 in cluster A

Actual: 59 ft.

RCRA-SQG:

Date form received by agency:	09/01/1996
Facility name:	REDWOOD CITY SCHOOL DIST
Facility address:	555 AVENUE DE ORA REDWOOD CITY, CA 94062
EPA ID:	CAD981162894
Mailing address:	815 ALLERTON ST REDWOOD CITY, CA 94063
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212

REDWOOD CITY SCHOOL DIST (Continued) **1000438508**

Legal status: District
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: REDWOOD CITY SCHOOL DIST
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: District
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 11/14/1985
Site name: REDWOOD CITY SCHOOL DIST
Classification: Large Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110002679290

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

REDWOOD CITY SCHOOL DIST (Continued) **1000438508**

Envid: 1000438508
Registry ID: 110002679290
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110002679290

HAZNET:
envid: 1000438508
Year: 1998
GEPAID: CAD981162894
Contact: Not reported
Telephone: 0000000000
Mailing Name: Not reported
Mailing Address: 2317 BROADWAY STE 10
Mailing City,St,Zip: REDWOOD CITY, CA 940631360
Gen County: Not reported
TSD EPA ID: CAL000027741
TSD County: Not reported
Waste Category: Asbestos containing waste
Disposal Method: Disposal, Land Fill
Tons: 2.5284
Cat Decode: Not reported
Method Decode: Not reported
Facility County: San Mateo

envid: 1000438508
Year: 1997
GEPAID: CAD981162894
Contact: Not reported
Telephone: 0000000000
Mailing Name: Not reported
Mailing Address: 2317 BROADWAY STE 10
Mailing City,St,Zip: REDWOOD CITY, CA 940631360
Gen County: Not reported
TSD EPA ID: CAD982042475
TSD County: Not reported
Waste Category: Asbestos containing waste
Disposal Method: Disposal, Land Fill
Tons: 10.1136
Cat Decode: Not reported
Method Decode: Not reported
Facility County: San Mateo

A3 **REDWOOD CITY SD-JOHN GILL ELEMENTARY** **HAZNET** **S112938963**
Target **555 AVENUE DEL ORA** **N/A**
Property **REDWOOD CITY, CA 94062**

Site 3 of 3 in cluster A

Actual: 59 ft.

HAZNET:
envid: S112938963
Year: 2004
GEPAID: CAC002579747
Contact: DON DIAS
Telephone: 6505692374
Mailing Name: Not reported
Mailing Address: 750 BRADFORD ST
Mailing City,St,Zip: REDWOOD CITY, CA 940631360
Gen County: Not reported

REDWOOD CITY SD-JOHN GILL ELEMENTARY (Continued) **S112938963**

TSD EPA ID: CAD028409019
TSD County: Not reported
Waste Category: Other organic solids
Disposal Method: Transfer Station
Tons: 0.08
Cat Decode: Not reported
Method Decode: Not reported
Facility County: San Mateo

B4
ENE
< 1/8
0.021 mi.
112 ft.

CITY OF REDWOOD CITY/FIRE STATION #2 **SWEEPS UST** **S106924633**
2190 JEFFERSON **N/A**
REDWOOD CITY, CA 94063

Site 1 of 2 in cluster B

Relative:
Lower

Actual:
37 ft.

SWEEPS UST:
Status: Active
Comp Number: 330169
Number: 4
Board Of Equalization: Not reported
Referral Date: 05-16-94
Action Date: 05-16-94
Created Date: 05-16-94
Owner Tank Id: Not reported
SWRCB Tank Id: Not reported
Tank Status: Not reported
Capacity: Not reported
Active Date: Not reported
Tank Use: Not reported
STG: Not reported
Content: Not reported
Number Of Tanks: Not reported

B5
ENE
< 1/8
0.021 mi.
112 ft.

FIRE STATION #10 **San Mateo Co. BI** **S113755647**
2190 JEFFERSON **N/A**
REDWOOD CITY, CA 94063

Site 2 of 2 in cluster B

Relative:
Lower

Actual:
37 ft.

San Mateo Co. BI:
Region: SAN MATEO
Facility ID: FA0011296
Prog Element Code: STORES MV FUELS OR WASTE ONLY
Record Id: PR0023517
Description: STORES MV FUELS OR WASTE ONLY
Facility Status: INACTIVE

Region: SAN MATEO
Facility ID: FA0011296
Prog Element Code: UNDERGROUND TANK - GENERAL
Record Id: PR0022463
Description: UNDERGROUND TANK - GENERAL
Facility Status: INACTIVE

6
North
< 1/8
0.023 mi.
124 ft.

WEST BAY MOBILE AUTO TRUCK SVC
1135 HARRISON AVE
REDWOOD CITY, CA 94062

EDR Hist Auto **1021288393**
N/A

Relative:
Lower

Actual:
36 ft.

EDR Hist Auto

Year:	Name:	Type:
2005	WEST BAY MOBILE AUTO TRUCK SVC	General Automotive Repair Shops
2006	WEST BAY MOBILE AUTO TRUCK SVC	General Automotive Repair Shops
2007	WEST BAY MOBILE AUTO TRUCK SVC	General Automotive Repair Shops
2008	WEST BAY MOBILE AUTO TRUCK SVC	General Automotive Repair Shops
2009	WEST BAY MOBILE AUTO TRUCK SVC	General Automotive Repair Shops
2010	WEST BAY MOBILE AUTO TRUCK SVC	General Automotive Repair Shops
2011	WEST BAY MOBILE AUTO TRUCK SVC	General Automotive Repair Shops
2012	WEST BAY MOBILE AUTO TRUCK SVC	General Automotive Repair Shops
2013	WEST BAY MOBILE AUTO TRUCK SVC	General Automotive Repair Shops
2014	WEST BAY MOBILE AUTO TRUCK SVC	General Automotive Repair Shops

---

7
East
< 1/8
0.123 mi.
648 ft.

GLOBAL GARAGE LLC
1105 MADISON AVE
REDWOOD CITY, CA 94061

EDR Hist Auto **1020274345**
N/A

Relative:
Lower

Actual:
34 ft.

EDR Hist Auto

Year:	Name:	Type:
2007	GLOBAL GARAGE LLC	General Automotive Repair Shops
2008	GLOBAL GARAGE LLC	General Automotive Repair Shops
2009	GLOBAL GARAGE LLC	General Automotive Repair Shops
2010	GLOBAL GARAGE LLC	General Automotive Repair Shops
2011	GLOBAL GARAGE LLC	General Automotive Repair Shops
2012	GLOBAL GARAGE LLC	General Automotive Repair Shops
2013	GLOBAL GARAGE LLC	General Automotive Repair Shops
2014	GLOBAL GARAGE LLC	General Automotive Repair Shops

8
NNW
1/8-1/4
0.208 mi.
1099 ft.

PATRICIAN FINISHES
322 KING ST
REDWOOD CITY, CA 94062

RCRA-SQG **1001959733**
CAR000060194

Relative:
Lower

Actual:
32 ft.

RCRA-SQG:

Date form received by agency:	12/09/1999
Facility name:	PATRICIAN FINISHES
Facility address:	322 KING ST REDWOOD CITY, CA 94062
EPA ID:	CAR000060194
Contact:	WILLIAM HASTY
Contact address:	322 KING ST REDWOOD CITY, CA 94062
Contact country:	US
Contact telephone:	(650) 369-9765
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator

PATRICIAN FINISHES (Continued) **1001959733**

Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	WILLIAM HASTY
Owner/operator address:	322 KING ST REDWOOD CITY, CA 94062
Owner/operator country:	Not reported
Owner/operator telephone:	(650) 222-4765
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

. Waste code: D001
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

---

9 SW 1/4-1/2 0.393 mi. 2073 ft.

Relative: Higher

Actual: 69 ft.

JEFFERSON CHEVRON **LUST U001594477**
3139 JEFFERSON AVE **HIST UST N/A**
REDWOOD CITY, CA 94061

LUST:

Region:	STATE
Global Id:	T0608189635
Latitude:	37.4697007062595
Longitude:	-122.246851846576
Case Type:	LUST Cleanup Site
Status:	Open - Verification Monitoring
Status Date:	07/27/2011
Lead Agency:	SAN MATEO COUNTY LOP
Case Worker:	DGM
Local Agency:	SAN MATEO COUNTY LOP
RB Case Number:	41-4019
LOC Case Number:	330179

JEFFERSON CHEVRON (Continued) **U001594477**

File Location: Local Agency
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Can be extracted from most recent report in Geotracker or at San Mateo County offices if submitted prior to 2005, San Mateo County does not take responsibility for the accuracy of the statements made or any professional interpretations made in the referenced report.

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0608189635
Contact Type: Local Agency Caseworker
Contact Name: DENO MILANO
Organization Name: SAN MATEO COUNTY LOP
Address: 2000 ALAMEDA DE LAS PULGAS
City: SAN MATEO
Email: dmilano@smcgov.org
Phone Number: 6503726292

Global Id: T0608189635
Contact Type: Regional Board Caseworker
Contact Name: Regional Water Board
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Address: 1515 CLAY ST SUITE 1400
City: OAKLAND
Email: Not reported
Phone Number: Not reported

Status History:
Global Id: T0608189635
Status: Open - Case Begin Date
Status Date: 06/03/1999

Global Id: T0608189635
Status: Open - Site Assessment
Status Date: 12/30/1999

Global Id: T0608189635
Status: Open - Verification Monitoring
Status Date: 07/27/2011

Regulatory Activities:
Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 09/05/2012
Action: Staff Letter - #20120905

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 07/17/2013
Action: Staff Letter - #20130717

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 05/07/2013
Action: Technical Correspondence / Assistance / Other - #20130507

JEFFERSON CHEVRON (Continued) **U001594477**

Global Id: T0608189635
Action Type: RESPONSE
Date: 05/15/2011
Action: Monitoring Report - Semi-Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/15/2010
Action: Electronic Reporting Submittal Due

Global Id: T0608189635
Action Type: RESPONSE
Date: 09/08/2008
Action: Other Report / Document

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/16/2015
Action: Soil Vapor Intrusion Investigation Report

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 02/14/2011
Action: Notice of Violation - #20110214

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 02/14/2017
Action: Email Correspondence - #20170214

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 01/24/2013
Action: Technical Correspondence / Assistance / Other - #20130124

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 10/04/2005
Action: Staff Letter - #20051004

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 08/19/2004
Action: Staff Letter - #20041019

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 05/30/2003
Action: Staff Letter - #20030530

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 07/15/2003
Action: Notice of Violation - #20030715

Global Id: T0608189635
Action Type: ENFORCEMENT

JEFFERSON CHEVRON (Continued) **U001594477**

Date: 09/13/2004
Action: Staff Letter - #20040913

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 05/15/2003
Action: Staff Letter - #20030515

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 08/06/2003
Action: Staff Letter - #20030806

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 12/15/2003
Action: Staff Letter - #20031215B

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 11/12/2003
Action: Verbal Enforcement - #20031112

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 09/12/2005
Action: Staff Letter - #20050912

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 08/27/2003
Action: Staff Letter - #20030827

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 09/04/2007
Action: Technical Correspondence / Assistance / Other - #20070904

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 02/24/2006
Action: Staff Letter - #20060224A

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 02/24/2006
Action: Staff Letter - #20060224

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 05/08/2006
Action: Staff Letter - #20060508

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 05/29/2003
Action: Staff Letter - #20030529A

JEFFERSON CHEVRON (Continued) **U001594477**

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 05/29/2003
Action: Staff Letter - #20030529B

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 09/05/2003
Action: Technical Correspondence / Assistance / Other - #20030905

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 07/15/2003
Action: Staff Letter - #20030715

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 08/27/2003
Action: Rescission of Enforcement Action - #20030827

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 11/03/2003
Action: Staff Letter - #20031103B

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 12/18/2003
Action: Technical Correspondence / Assistance / Other - #20031218

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 12/15/2003
Action: Staff Letter - #20031215A

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 03/15/2004
Action: Staff Letter - #20040315

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 05/08/2008
Action: Staff Letter - #20080508

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 02/03/2004
Action: Technical Correspondence / Assistance / Other - #20040203

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 09/03/2003
Action: Staff Letter - #20030903A

Global Id: T0608189635
Action Type: RESPONSE

JEFFERSON CHEVRON (Continued) **U001594477**

Date: 01/26/2003
Action: Other Workplan

Global Id: T0608189635
Action Type: RESPONSE
Date: 06/26/2003
Action: Other Report / Document

Global Id: T0608189635
Action Type: RESPONSE
Date: 05/15/2009
Action: Risk Assessment Report

Global Id: T0608189635
Action Type: RESPONSE
Date: 05/15/2008
Action: Monitoring Report - Semi-Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 12/10/2008
Action: Soil and Water Investigation Report

Global Id: T0608189635
Action Type: RESPONSE
Date: 12/31/2015
Action: Well Destruction Report

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 11/14/2007
Action: Staff Letter - #20071114

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 06/11/2007
Action: Notice of Violation - #20070611

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 11/14/2007
Action: Notice of Violation - #20071114

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 06/11/2007
Action: Staff Letter - #20070611

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 02/11/2004
Action: Staff Letter - #20040211B

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 07/14/1999
Action: Notice of Responsibility - #19990714

JEFFERSON CHEVRON (Continued) **U001594477**

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 01/28/2008
Action: Staff Letter - #20080128

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 01/26/2004
Action: Technical Correspondence / Assistance / Other - #20040126

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 12/11/2003
Action: Staff Letter - #20031211

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 11/16/2004
Action: Staff Letter - #20041116

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 02/10/2004
Action: Technical Correspondence / Assistance / Other - #20040210

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 03/18/2004
Action: Staff Letter - #20040318

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 09/09/2004
Action: Technical Correspondence / Assistance / Other - #20040904

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 07/27/2011
Action: Staff Letter - #20110727

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 09/02/2015
Action: Staff Letter - #20150902

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 07/26/2012
Action: Technical Correspondence / Assistance / Other - #20120726

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 07/26/2012
Action: Technical Correspondence / Assistance / Other - #20120726

Global Id: T0608189635
Action Type: ENFORCEMENT

JEFFERSON CHEVRON (Continued) **U001594477**

Date: 04/29/2013
Action: Notice of Violation - #20130429

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 07/23/2008
Action: Staff Letter - #20080723

Global Id: T0608189635
Action Type: RESPONSE
Date: 07/13/2005
Action: Soil and Water Investigation Workplan

Global Id: T0608189635
Action Type: RESPONSE
Date: 02/02/2006
Action: Soil and Water Investigation Report

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/04/2005
Action: NPDES / WDR Reports

Global Id: T0608189635
Action Type: RESPONSE
Date: 03/30/2004
Action: Electronic Reporting Submittal Due

Global Id: T0608189635
Action Type: RESPONSE
Date: 03/30/2004
Action: Other Workplan

Global Id: T0608189635
Action Type: RESPONSE
Date: 12/17/2009
Action: Clean Up Fund - 5-Year Review Summary

Global Id: T0608189635
Action Type: RESPONSE
Date: 05/15/2015
Action: Monitoring Report - Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/15/2015
Action: Electronic Reporting Submittal Due

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 03/04/2015
Action: Staff Letter - #20150304

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 05/22/2014
Action: Technical Correspondence / Assistance / Other - #20140522

JEFFERSON CHEVRON (Continued) **U001594477**

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 10/20/2014
Action: Staff Letter - #20141020

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 05/08/2013
Action: Staff Letter - #20130508

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 12/06/2016
Action: Staff Letter - #20161206

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 05/04/2016
Action: Notice of Violation - #20160524

Global Id: T0608189635
Action Type: RESPONSE
Date: 08/30/2010
Action: Risk Assessment Report

Global Id: T0608189635
Action Type: RESPONSE
Date: 01/26/2005
Action: Other Workplan

Global Id: T0608189635
Action Type: RESPONSE
Date: 01/26/2005
Action: Soil and Water Investigation Workplan - Addendum

Global Id: T0608189635
Action Type: RESPONSE
Date: 01/30/2010
Action: Other Report / Document

Global Id: T0608189635
Action Type: RESPONSE
Date: 03/26/2004
Action: Tank Removal Report / UST Sampling Report

Global Id: T0608189635
Action Type: RESPONSE
Date: 05/15/2016
Action: Monitoring Report - Annually

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 11/30/2009
Action: Staff Letter - #20091130

Global Id: T0608189635
Action Type: ENFORCEMENT

JEFFERSON CHEVRON (Continued) **U001594477**

Date: 01/04/2016
Action: Email Correspondence - #20160104

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 05/11/2016
Action: Staff Letter - #20160511

Global Id: T0608189635
Action Type: RESPONSE
Date: 10/17/2008
Action: Clean Up Fund - 5-Year Review Summary

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/15/2011
Action: Electronic Reporting Submittal Due

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 01/19/2017
Action: Email Correspondence - #20170119

Global Id: T0608189635
Action Type: Other
Date: 07/15/1999
Action: Leak Reported

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/15/2012
Action: Electronic Reporting Submittal Due

Global Id: T0608189635
Action Type: RESPONSE
Date: 05/15/2012
Action: Monitoring Report - Annually

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 11/26/2003
Action: Staff Letter - #20031126

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 05/18/2005
Action: Staff Letter - #20050518

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 11/03/2003
Action: Staff Letter - #20031103A

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 04/30/2013
Action: Staff Letter - #20130430

JEFFERSON CHEVRON (Continued) **U001594477**

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 12/27/2012
Action: Notice of Violation - #20121227

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/15/2008
Action: Monitoring Report - Semi-Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/15/2009
Action: Monitoring Report - Semi-Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 09/30/2007
Action: Other Report / Document

Global Id: T0608189635
Action Type: RESPONSE
Date: 10/27/2003
Action: Correspondence

Global Id: T0608189635
Action Type: RESPONSE
Date: 05/15/2009
Action: Monitoring Report - Semi-Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 03/30/2004
Action: Correspondence

Global Id: T0608189635
Action Type: RESPONSE
Date: 06/22/2005
Action: Well Installation Report

Global Id: T0608189635
Action Type: RESPONSE
Date: 05/15/2010
Action: Monitoring Report - Semi-Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 01/26/2004
Action: Other Workplan

Global Id: T0608189635
Action Type: RESPONSE
Date: 04/20/2004
Action: Soil and Water Investigation Workplan

Global Id: T0608189635
Action Type: RESPONSE

JEFFERSON CHEVRON (Continued) **U001594477**

Date: 05/16/2005
Action: Monitoring Report - Semi-Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 05/15/2006
Action: Monitoring Report - Semi-Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 05/15/2007
Action: Monitoring Report - Semi-Annually

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 08/05/2009
Action: Staff Letter - #20090805

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 09/03/2003
Action: Staff Letter - #20030903B

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 09/17/2003
Action: Staff Letter - #20030917

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 08/19/2004
Action: Staff Letter - #20040819A

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 05/09/2013
Action: Notice of Responsibility - #20130509

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/14/2008
Action: Risk Assessment Report

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/15/2016
Action: Electronic Reporting Submittal Due

Global Id: T0608189635
Action Type: RESPONSE
Date: 05/15/2014
Action: Monitoring Report - Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 05/15/2013
Action: Monitoring Report - Annually

JEFFERSON CHEVRON (Continued) **U001594477**

Global Id: T0608189635
Action Type: RESPONSE
Date: 04/10/2014
Action: Soil Vapor Intrusion Investigation Report

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/15/2013
Action: Electronic Reporting Submittal Due

Global Id: T0608189635
Action Type: RESPONSE
Date: 10/31/2012
Action: Soil Vapor Intrusion Investigation Workplan - Regulator Responded

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 02/28/2012
Action: Staff Letter - #20120228

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 12/28/2016
Action: Email Correspondence - #20161228

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 09/09/2015
Action: Staff Letter - #20150909

Global Id: T0608189635
Action Type: RESPONSE
Date: 07/15/2003
Action: NPDES / WDR Reports

Global Id: T0608189635
Action Type: RESPONSE
Date: 04/26/2004
Action: NPDES / WDR Reports

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/28/2007
Action: Risk Assessment Report

Global Id: T0608189635
Action Type: RESPONSE
Date: 08/29/2007
Action: Other Workplan

Global Id: T0608189635
Action Type: RESPONSE
Date: 06/04/2008
Action: Soil and Water Investigation Report

Global Id: T0608189635
Action Type: ENFORCEMENT

JEFFERSON CHEVRON (Continued) **U001594477**

Date: 08/01/2003
Action: Injunctive Relief

Global Id: T0608189635
Action Type: Other
Date: 06/03/1999
Action: Leak Discovery

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 02/11/2004
Action: Staff Letter - #20040211A

Global Id: T0608189635
Action Type: RESPONSE
Date: 09/08/2003
Action: Soil and Water Investigation Report

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/15/2004
Action: Monitoring Report - Semi-Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/15/2005
Action: Monitoring Report - Semi-Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/15/2006
Action: Monitoring Report - Semi-Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/15/2007
Action: Monitoring Report - Semi-Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 12/09/2004
Action: Other Report / Document

Global Id: T0608189635
Action Type: RESPONSE
Date: 01/26/2005
Action: Other Report / Document

Global Id: T0608189635
Action Type: RESPONSE
Date: 01/26/2005
Action: Monitoring Report - Other

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/15/2014
Action: Electronic Reporting Submittal Due

JEFFERSON CHEVRON (Continued) **U001594477**

Global Id: T0608189635
Action Type: REMEDIATION
Date: 06/03/1999
Action: Excavation

Global Id: T0608189635
Action Type: REMEDIATION
Date: 01/16/2004
Action: Pump & Treat (P&T) Groundwater

Global Id: T0608189635
Action Type: REMEDIATION
Date: 01/12/2004
Action: Excavation

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Pollution Characterization
Case Number: 330179
How Discovered: SA
Leak Cause: Unknown
Leak Source: Unknown
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: 12/30/1999
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

SAN MATEO CO. LUST:
Region: SAN MATEO
Facility ID: 330179
Facility Status: 5C- Pollution Characterization
Global ID: T0608189635
APN Number: 058322100
Case Type: SAN MATEO CO. LUST
EDR Link ID: SAN MATEO CO. LUST

HIST UST:
File Number: 0002C014
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002C014.pdf
Region: STATE
Facility ID: 00000058986
Facility Type: Gas Station
Other Type: Not reported
Contact Name: MICHAEL J. MACCHIA
Telephone: 4153663789
Owner Name: MAC-GO INC.
Owner Address: 868 ALTOS OAKS DR.
Owner City,St,Zip: LOS ALTOS, CA 94022
Total Tanks: 0005

JEFFERSON CHEVRON (Continued) **U001594477**

Tank Num: 001
Container Num: 1
Year Installed: Not reported
Tank Capacity: 00004000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Tank Num: 002
Container Num: 2
Year Installed: Not reported
Tank Capacity: 00000000
Tank Used for: PRODUCT
Type of Fuel: PREMIUM
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Tank Num: 003
Container Num: 3
Year Installed: Not reported
Tank Capacity: 00000000
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Container Construction Thickness: Not reported
Leak Detection: None

Tank Num: 004
Container Num: 4
Year Installed: Not reported
Tank Capacity: 00008000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Tank Num: 005
Container Num: 5
Year Installed: Not reported
Tank Capacity: 00004000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Click here for Geo Tracker PDF:

C10 **REDWOOD CITY SCHOOL DISTRICT** **LUST** **U001594512**
NNE **601 JAMES AVE.** **UST** **N/A**
1/4-1/2 **REDWOOD CITY, CA 94062** **SWEEPS UST**
0.396 mi. **HIST UST**
2091 ft. **Site 1 of 2 in cluster C**

Relative:
Lower

Actual:
22 ft.

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 330068

REDWOOD CITY SCHOOL DISTRICT (Continued) **U001594512**

How Discovered: OM
Leak Cause: Unknown
Leak Source: Unknown
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

UST:
Facility ID: 41-000-330153
Permitting Agency: SAN MATEO COUNTY
Latitude: 37.48086
Longitude: -122.23761

Facility ID: Not reported
Permitting Agency: San Mateo County Environmental Health
Latitude: 37.480701
Longitude: -122.237549

SWEEPS UST:
Status: Active
Comp Number: 330153
Number: 6
Board Of Equalization: Not reported
Referral Date: 05-14-94
Action Date: 05-14-94
Created Date: 04-26-93
Owner Tank Id: L212006-01
SWRCB Tank Id: 41-000-330153-000001
Tank Status: A
Capacity: 2500
Active Date: 04-07-94
Tank Use: M.V. FUEL
STG: P
Content: PRM UNLEADED
Number Of Tanks: 1

HIST UST:
File Number: Not reported
URL: Not reported
Region: STATE
Facility ID: 00000056768
Facility Type: Other
Other Type: VEHICLE YARD
Contact Name: DONALD K. MARCUS
Telephone: 4153644586
Owner Name: REDWOOD CITY SCHOOL DISTRICT
Owner Address: 815 ALLERTON STREET
Owner City,St,Zip: REDWOOD CITY, CA 94063
Total Tanks: 0003

Tank Num: 001

REDWOOD CITY SCHOOL DISTRICT (Continued) **U001594512**

Container Num:	59212-1
Year Installed:	1967
Tank Capacity:	00002000
Tank Used for:	PRODUCT
Type of Fuel:	PREMIUM
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor
Tank Num:	002
Container Num:	3
Year Installed:	Not reported
Tank Capacity:	00000200
Tank Used for:	WASTE
Type of Fuel:	WASTE OIL
Container Construction Thickness:	Not reported
Leak Detection:	None
Tank Num:	003
Container Num:	2
Year Installed:	Not reported
Tank Capacity:	00001000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor

C11 **REDWOOD CITY SCHOOL DISTR** **LUST** **S104161767**
NNE **601 JAMES** **HIST CORTESE** **N/A**
1/4-1/2 **REDWOOD CITY, CA 94063**
0.396 mi.
2091 ft. **Site 2 of 2 in cluster C**

Relative:
Lower

Actual:
22 ft.

LUST:

Region:	STATE
Global Id:	T0608100420
Latitude:	37.4816307
Longitude:	-122.2366291
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	08/05/2002
Lead Agency:	SAN MATEO COUNTY LOP
Case Worker:	DGM
Local Agency:	SAN MATEO COUNTY LOP
RB Case Number:	41-0441
LOC Case Number:	330068
File Location:	Local Agency
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0608100420
Contact Type:	Local Agency Caseworker
Contact Name:	DENO MILANO
Organization Name:	SAN MATEO COUNTY LOP
Address:	2000 ALAMEDA DE LAS PULGAS

REDWOOD CITY SCHOOL DISTR (Continued) **S104161767**

City: SAN MATEO
Email: dmilano@smcgov.org
Phone Number: 6503726292

Global Id: T0608100420
Contact Type: Regional Board Caseworker
Contact Name: Regional Water Board
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Address: 1515 CLAY ST SUITE 1400
City: OAKLAND
Email: Not reported
Phone Number: Not reported

Status History:
Global Id: T0608100420
Status: Completed - Case Closed
Status Date: 08/05/2002

Global Id: T0608100420
Status: Open - Case Begin Date
Status Date: 04/26/1990

Regulatory Activities:
Global Id: T0608100420
Action Type: Other
Date: 04/26/1990
Action: Leak Reported

Global Id: T0608100420
Action Type: ENFORCEMENT
Date: 04/26/1990
Action: Notice of Responsibility - #1

Global Id: T0608100420
Action Type: REMEDIATION
Date: 07/03/1989
Action: Excavation

Global Id: T0608100420
Action Type: REMEDIATION
Date: 07/03/1989
Action: Pump & Treat (P&T) Groundwater

SAN MATEO CO. LUST:
Region: SAN MATEO
Facility ID: 330068
Facility Status: 9- Case Closed
Global ID: T0608100420
APN Number: 052202010
Case Type: SAN MATEO CO. LUST
EDR Link ID: SAN MATEO CO. LUST

HIST CORTESE:
Region: CORTESE

REDWOOD CITY SCHOOL DISTR (Continued) **S104161767**

Facility County Code: 41
Reg By: LTNKA
Reg Id: 41-0441

12
NNE
1/2-1
0.810 mi.
4278 ft.

ROBISON PROPERTY
827 EL CAMINO REAL
REDWOOD CITY, CA 94063

ENVIROSTOR
SLIC
VCP

S106131297
N/A

Relative:
Lower

Actual:
17 ft.

ENVIROSTOR:
Facility ID: 60001444
Status: Active
Status Date: 04/12/2011
Site Code: 201905
Site Type: Voluntary Cleanup
Site Type Detailed: Voluntary Cleanup
Acres: 0.4
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Charles (Chip) Gribble
Supervisor: Julie Pettijohn
Division Branch: Cleanup Berkeley
Assembly: 24
Senate: 13
Special Program: Voluntary Cleanup Program
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Responsible Party
Latitude: 37.46007
Longitude: -122.1959
APN: NONE SPECIFIED
Past Use: DRY CLEANING
Potential COC: Tetrachloroethylene (PCE Trichloroethylene (TCE
Confirmed COC: 30022-NO 30027-NO
Potential Description: SOIL, SV, UE
Alias Name: T0608127441
Alias Type: GeoTracker Global ID
Alias Name: 201905
Alias Type: Project Code (Site Code)
Alias Name: 60001444
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: Not reported
Completed Sub Area Name: Not reported
Completed Document Type: Not reported
Completed Date: Not reported
Comments: Not reported

Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Site Screening
Future Due Date: 2017
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported

ROBISON PROPERTY (Continued) **S106131297**

Schedule Due Date: Not reported
Schedule Revised Date: Not reported

SLIC:

Region:	STATE
Facility Status:	**Open - Site Assessment**
Status Date:	05/05/2008
Global Id:	T0608127441
Lead Agency:	DEPARTMENT OF TOXIC SUBSTANCES CONTROL
Lead Agency Case Number:	60001444
Latitude:	37.485911
Longitude:	-122.234502
Case Type:	Cleanup Program Site
Case Worker:	Not reported
Local Agency:	SAN MATEO COUNTY LOP
RB Case Number:	Not reported
File Location:	Local Agency
Potential Media Affected:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	* Chlorinated Hydrocarbons
Site History:	Can be extracted from most recent report in Geotracker or at San Mateo County offices if submitted prior to 2005, San Mateo County does not take responsibility for the accuracy of the statements made or any professional interpretations made in the referenced report.

Click here to access the California GeoTracker records for this facility:

VCP:

Facility ID:	60001444
Site Type:	Voluntary Cleanup
Site Type Detail:	Voluntary Cleanup
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	0.4
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Charles (Chip) Gribble
Supervisor:	Julie Pettijohn
Division Branch:	Cleanup Berkeley
Site Code:	201905
Assembly:	24
Senate:	13
Special Programs Code:	Voluntary Cleanup Program
Status:	Active
Status Date:	04/12/2011
Restricted Use:	NO
Funding:	Responsible Party
Lat/Long:	37.46007 / -122.1959
APN:	NONE SPECIFIED
Past Use:	DRY CLEANING
Potential COC:	30022, 30027
Confirmed COC:	30022-NO,30027-NO
Potential Description:	SOIL, SV, UE
Alias Name:	T0608127441
Alias Type:	GeoTracker Global ID
Alias Name:	201905

ROBISON PROPERTY (Continued) **S106131297**

Alias Type: Project Code (Site Code)
Alias Name: 60001444
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: Not reported
Completed Sub Area Name: Not reported
Completed Document Type: Not reported
Completed Date: Not reported
Comments: Not reported

Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Site Screening
Future Due Date: 2017
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

13
ENE
1/2-1
0.812 mi.
4287 ft.

TOWNE FORD SALES **LUST** **1000311542**
1601 EL CAMINO REAL **HIST UST** **N/A**
REDWOOD CITY, CA 94063 **Notify 65**

Relative:
Lower

Actual:
18 ft.

LUST:
Region: STATE
Global Id: T0608100547
Latitude: 37.4799709412402
Longitude: -122.225475311279
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 10/12/1995
Lead Agency: SAN MATEO COUNTY LOP
Case Worker: DGM
Local Agency: SAN MATEO COUNTY LOP
RB Case Number: 41-0573
LOC Case Number: 330023
File Location: Local Agency
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Waste Oil / Motor / Hydraulic / Lubricating
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0608100547
Contact Type: Local Agency Caseworker
Contact Name: DENO MILANO
Organization Name: SAN MATEO COUNTY LOP
Address: 2000 ALAMEDA DE LAS PULGAS
City: SAN MATEO
Email: dmilano@smcgov.org
Phone Number: 6503726292

Global Id: T0608100547
Contact Type: Regional Board Caseworker

TOWNE FORD SALES (Continued) **1000311542**

Contact Name: Regional Water Board
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Address: 1515 CLAY ST SUITE 1400
City: OAKLAND
Email: Not reported
Phone Number: Not reported

Status History:
Global Id: T0608100547
Status: Completed - Case Closed
Status Date: 10/12/1995

Global Id: T0608100547
Status: Open - Case Begin Date
Status Date: 12/20/1988

Regulatory Activities:
Global Id: T0608100547
Action Type: Other
Date: 12/22/1988
Action: Leak Discovery

Global Id: T0608100547
Action Type: ENFORCEMENT
Date: 05/28/1990
Action: Notice of Responsibility - #1

Global Id: T0608100547
Action Type: Other
Date: 12/20/1988
Action: Leak Reported

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 330023
How Discovered: OM
Leak Cause: Unknown
Leak Source: Unknown
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

SAN MATEO CO. LUST:
Region: SAN MATEO
Facility ID: 330023
Facility Status: 9- Case Closed
Global ID: T0608100547

TOWNE FORD SALES (Continued) **1000311542**

APN Number: 053185060
Case Type: SAN MATEO CO. LUST
EDR Link ID: SAN MATEO CO. LUST

HIST UST:
File Number: 0002C39C
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002C39C.pdf
Region: STATE
Facility ID: 00000004128
Facility Type: Other
Other Type: AUTO DEALER
Contact Name: TIM TOLAND
Telephone: 4153665744
Owner Name: TOWNE FORD SALES
Owner Address: 1601 EL CAMINO REAL
Owner City,St,Zip: REDWOOD CITY, CA 94063
Total Tanks: 0001

Tank Num: 001
Container Num: 1
Year Installed: 1956
Tank Capacity: 00001000
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Container Construction Thickness: Not reported
Leak Detection: None

Click here for Geo Tracker PDF:

NOTIFY 65:
Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Issue Date: Not reported
Incident Description: Not reported

---

14 **FORMER DEMMA PARCELS** **ENVIROSTOR** **S109422388**
ENE **104 AND 112 CEDAR** **N/A**
1/2-1 **REDWOOD CITY, CA 94063**
0.893 mi.
4716 ft.

Relative:
Lower

Actual:
19 ft.

ENVIROSTOR:
Facility ID: 60001045
Status: Refer: 1248 Local Agency
Status Date: 06/15/2006
Site Code: Not reported
Site Type: Evaluation
Site Type Detailed: Evaluation
Acres: 1
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Not reported
Supervisor: Referred - Not Assigned

FORMER DEMMA PARCELS (Continued) **S109422388**

Division Branch: Cleanup Berkeley
Assembly: 40
Senate: 23
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not Applicable
Latitude: 34.03204
Longitude: -117.1858
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: 60001045
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 06/15/2006
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

15
North
1/2-1
0.924 mi.
4877 ft.

ARTON MANAGEMENT/INVESTMENT COMPANY
570 EL CAMINO REAL
REDWOOD CITY, CA 94063

ENVIROSTOR **U001594591**
LUST **N/A**
HIST UST

Relative:
Lower

Actual:
22 ft.

ENVIROSTOR:
Facility ID: 41550010
Status: Refer: Other Agency
Status Date: 04/24/2002
Site Code: Not reported
Site Type: Evaluation
Site Type Detailed: Evaluation
Acres: Not reported
NPL: NO
Regulatory Agencies: SMBRP, SAN MATEO COUNTY
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Denise Tsuji
Division Branch: Cleanup Berkeley
Assembly: 22
Senate: 13
Special Program: Not reported
Restricted Use: NO

ARTON MANAGEMENT/INVESTMENT COMPANY (Continued) **U001594591**

Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 37.48894
Longitude: -122.2386
APN: 052181250
Past Use: RETAIL - SERVICE STATION, RETAIL - VEHICLES
Potential COC: * WASTE OIL & MIXED OIL TPH-diesel
Confirmed COC: TPH-diesel * WASTE OIL & MIXED OIL
Potential Description: SOIL
Alias Name: 052181250
Alias Type: APN
Alias Name: 41550010
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 02/28/1991
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 04/24/2002
Comments: Site screening completed. Site referred to San Mateo County Environmental Health Department.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

LUST:
Region: STATE
Global Id: T0608101054
Latitude: 37.488925
Longitude: -122.238638
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 04/30/1991
Lead Agency: SAN MATEO COUNTY LOP
Case Worker: DGM
Local Agency: SAN MATEO COUNTY LOP
RB Case Number: 41-1150
LOC Case Number: 330066
File Location: Local Agency Warehouse
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Not reported
Site History: Not reported

ARTON MANAGEMENT/INVESTMENT COMPANY (Continued) **U001594591**

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0608101054
Contact Type:	Local Agency Caseworker
Contact Name:	DENO MILANO
Organization Name:	SAN MATEO COUNTY LOP
Address:	2000 ALAMEDA DE LAS PULGAS
City:	SAN MATEO
Email:	dmilano@smcgov.org
Phone Number:	6503726292

Global Id:	T0608101054
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

Status History:

Global Id:	T0608101054
Status:	Completed - Case Closed
Status Date:	04/30/1991

Global Id:	T0608101054
Status:	Open - Case Begin Date
Status Date:	01/01/1989

Regulatory Activities:

Global Id:	T0608101054
Action Type:	ENFORCEMENT
Date:	01/01/1989
Action:	Notice of Responsibility - #1

Global Id:	T0608101054
Action Type:	Other
Date:	02/01/1990
Action:	Leak Reported

SAN MATEO CO. LUST:

Region:	SAN MATEO
Facility ID:	330066
Facility Status:	9- Case Closed
Global ID:	T0608101054
APN Number:	052181250
Case Type:	SAN MATEO CO. LUST
EDR Link ID:	SAN MATEO CO. LUST

HIST UST:

File Number:	0002C0B3
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002C0B3.pdf
Region:	STATE

ARTON MANAGEMENT/INVESTMENT COMPANY (Continued) **U001594591**

Facility ID:	00000009927
Facility Type:	Other
Other Type:	AUTO DEALERSHIP
Contact Name:	DENNIS HOYT, SERVICE MGR.
Telephone:	4153694131
Owner Name:	MRS. PAULINE M. BARNESON
Owner Address:	1523 HOPKINS ST
Owner City,St,Zip:	REDWOOD CITY, CA 94063
Total Tanks:	0001
Tank Num:	001
Container Num:	3
Year Installed:	Not reported
Tank Capacity:	00000200
Tank Used for:	WASTE
Type of Fuel:	WASTE OIL
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

Click here for Geo Tracker PDF:

---

16 **COOKS AUTO BODY** **RCRA-SQG** **1000272042**
NE **1104 MAIN STREET** **ENVIROSTOR** **CAD981457179**
1/2-1 **REDWOOD CITY, CA 94063** **LUST**
0.940 mi. **FINDS**
4961 ft. **ECHO**

Relative:
Lower

Actual:
14 ft.

RCRA-SQG:

Date form received by agency:	04/02/1986
Facility name:	COOKS AUTO BODY
Facility address:	1104 MAIN STREET REDWOOD CITY, CA 94063
EPA ID:	CAD981457179
Contact:	THOMAS FRISCHE
Contact address:	1104 MAIN STREET REDWOOD CITY, CA 94063
Contact country:	US
Contact telephone:	(415) 365-3206
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	WOODS AUTO BODY INC
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

COOKS AUTO BODY (Continued) **1000272042**

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

ENVIROSTOR:
Facility ID: 60001847
Status: Inactive - Action Required
Status Date: 01/31/2013
Site Code: 201958
Site Type: Evaluation
Site Type Detailed: Evaluation
Acres: 0.3
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: George Chow
Supervisor: Julie Pettijohn
Division Branch: Cleanup Berkeley
Assembly: 22
Senate: 13
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Responsible Party
Latitude: 37.48273
Longitude: -122.2259
APN: 053-138-010
Past Use: FUEL - VEHICLE STORAGE/ REFUELING
Potential COC: Lead
Confirmed COC: Lead
Potential Description: SOIL
Alias Name: 053-138-010

COOKS AUTO BODY (Continued) **1000272042**

Alias Type: APN
Alias Name: T0608183982
Alias Type: GeoTracker Global ID
Alias Name: 201958
Alias Type: Project Code (Site Code)
Alias Name: 60001847
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 07/27/2012
Comments: This letter from the San Mateo Groundwater Protection Program (GPP) to DTSC includes the GPP's case closure for the hydrocarbon releases at this site and refers the metals contamination to DTSC. A summary of the remedial activities completed to date (July 2012) and the closure rationale can be found in this document.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 01/28/2013
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

LUST:
Region: STATE
Global Id: T0608183982
Latitude: 37.4829524
Longitude: -122.226044167
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 03/22/2013
Lead Agency: SAN MATEO COUNTY LOP
Case Worker: DGM
Local Agency: SAN MATEO COUNTY LOP
RB Case Number: 41-4057
LOC Case Number: 330188
File Location: Local Agency
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Extracted from Golden Gate Environmental's March 31, 2010 Report of Groundwater Monitoring & Additional Site Characterization, San Mateo County does not take responsibility for the accuracy of the statements made or any professional interpretations made in the referenced report. The subject property lies on the west side of Main Street and south of the intersection of Main and Maple Streets in

COOKS AUTO BODY (Continued) **1000272042**

Redwood City, California. The Site is approximately 0.4 mile south of the San Francisco Bay (Redwood Creek Inlet). The elevation of the property ranges between 11.70 and 12.38 feet above mean sea level. The property is relatively flat lying with the local topographic relief generally directed towards the north-northeast. The 0.3-acre property is roughly triangular in shape. The adjacent property to the west (1090 Main Street) is a multi-residential apartment/townhouse complex. Directly to the northeast across Main Street is the former upholstery facility for Cooks Auto Body (1101\\% Main Street; currently vacant) and Bobs Auto Repair facility (415 Cassia Street). A 9,000 square foot office and warehouse structure occupies the central portion of the subject property and a small office structure (625 square feet) is situated along the southeastern portion of the Site. The northernmost portion of the Site is where the former fueling station was historically located and is the subject of this evaluation. County Assessor Recorders Parcel No. 053-138-010). Cooks Auto Body has leased the Site since 1979 for a vehicle repair operation. The Site had previously been occupied by another auto body facility since 1969. Reportedly, Cooks Auto Body has never dispensed fuel from the property since 1979. A concrete dispenser island 18 feet in length by 3 feet in width (east-west orientation) is located approximately 13 feet north of the central north side of the building structure. A hydraulic lift was formerly located approximately 7 feet north of the central north wall of the building structure. Based on recorded observations of the product and vent piping removed beneath the northern portion of the Site (May 2004), it is evident that at least three USTs were once present at the property prior to Cooks Auto Bodys initial occupancy in 1979. Historic businesses that formerly operated at the Site include: Strand and Brain garage (1931-1933), Strand and Furger Autos (1937), Tacoma Distributing Company/Brewers Agents (1939), and Ferris Miles Inc Wholesaler (1953). A Redwood City Tribune article titled Miles Selling Car Agency dated May 10, 1969, describes business operations conducted across the street at 1101 Main Street from the years 1939 to 1969 by the late Ferris Miles (deceased 1982). Miles apparently co-owned the property at 1104 Main Street during the time interval spanning from 1939 to 1969 and Ferris-Miles Dodge occupied the Site in the mid 1960s. Based on review of Sanborn Fire Insurance Maps, the northern portion of the property was historically occupied by a fuel dispensing station from 1932 through 1962. In February 2002, EnviroVision, Inc. drilled exploratory borings SB-1, SB-2 and SB-3 to a depth of 15 feet. The purpose of the drilling was to assess the potential impact to soil and groundwater from reported fuel dispensing activities at the Site. In letters dated May 20 and June 4, 2002, the GPP identified Woods Limited Partnership as the responsible party (RP). On August 28 and November 18, 2002, EnviroVision submitted their Work Plan for Additional Site Characterization and Groundwater Monitoring and addendum that was approved by the GPP in a letter dated December 30, 2002. On January 10, 2003, EnviroVision in collaboration with Norcal Geophysical Consultants, Inc. conducted a geophysical survey to both trace the lateral extent of subsurface vent and product lines using line-locating equipment and locate any abandoned USTs using ground penetrating radar. EnviroVision identified several subsurface anomalies largeenough to represent potential underground storage tanks located in the sidewalk of the Maple Street frontage. In March and April 2003, EnviroVision drilled one additional soil boring SB-4

COOKS AUTO BODY (Continued) **1000272042**

and installed three 2-inch groundwater monitor wells MW-1, MW-2 and MW-3. In May 2004, Golden Gate Tank Removal, Inc. (GGTR) excavated five shallow locations where the previous geophysical survey by EnviroVision had indicated potential underground storage tank (UST) locations. No USTs were discovered in the exploratory excavations. A metal product line was uncovered in excavation area A and one soil sample was recovered from beneath the product line at two feet below grade for laboratory analysis. In September 2004, GGTR traced the lateral extent of the subsurface product and vent lines by hand digging. GGTR collected soil samples PLA[2], PL2B[2], PL2C[2], PL2D[2], PL2D[3.5], PL3A[2], and PL3B[2] beneath the exposed product lines and subsequently removed exposed piping from the trenches. Approximately 70 feet of product pipe and 50 feet of vent pipe were removed from the property for disposal at the Circosta Iron & Metal Company. Excavated soil was returned to the product line trenches as backfill. GGTR drilled five (5) soil borings SB-5 through SB-9 to a depth of 20 feet at the property. Borings SB-7 and SB-9 were converted to respective 2-inch groundwater monitor wells MW-5 and MW-4. Three additional soil borings SB-PL2A, SB-PL2D, and SB-PL3B were drilled to 12 feet to assess the vertical extent of soil contamination beneath the former product lines. No abandoned USTs were located during the exploratory drilling. In February 2007, GGTR drilled exploratory boring SB-13 to approximately 28 fbg. Soil samples were collected continuously in the boring between 5 and 24 fbg. The boring encountered silty clay to a depth of 15 feet, silty sand from 15 to 20 feet, and sandy gravel from 20 to 28 feet. New slotted well casing was temporarily installed in boring SB-13 and a grab groundwater sample collected after 20 minutes of recharge at a depth of 8.2 feet. A series of four separate Hydropunch borings were then drilled northward of the SB-13 location to obtain grab groundwater samples at 15, 20, 27 and 35 feet below grade. In February 2007, GGTR submitted a traffic control plan to the City of Redwood City for temporary closure of the roadway and re-routing of vehicular traffic, and on March 29, 2007, GGTR drilled boring SB-12 to a depth of 27 fbg. Soil samples were collected continuously in the boring between 5 and 24 fbg. Boring SB-12 encountered silty clay to a depth of 15 feet, silty sand from 15 to 19 feet, and sandy gravel from 19 to 27 feet. Hydrocarbon odor was recognized in the 10 foot soil sample only. Two soil samples from depths of 10 and 15 feet were submitted for analysis of TPH as gasoline and BTEX. The boring was terminated in heaving sands that prevented sample recovery below 24 feet. New slotted well casing was temporarily installed in boring SB-12 and a grab groundwater sample collected after 15 minutes of recharge at a depth of 11.5 feet. A series of four separate Hydropunch borings were then drilled northward of the boring SB-12 location to obtain grab groundwater samples at 15, 20, and 27 feet below grade. In the 4th Hydropunch boring, no groundwater was recovered at the 35 foot target depth. New slotted well casing was temporarily installed in boring 4. However, no groundwater was recovered in the casing after 45 minutes and the sampling was abandoned due to time constraints for the temporary roadway closure. On February 27, 2007, GGTR drilled new monitor well MW-6 to approximately 20 fbg, using 8-inch diameter, continuous flight, hollow-stem augers. Monitoring well MW-6 was constructed of standard 2-inch diameter, flush-threaded, Schedule 40 Polyvinyl Chloride (PVC) factory slotted (0.010 inch) well screen (@ 5 to 20 fbg) and blank riser casing (@ 0.5 to 5 fbg). On March 14 and 30, 2007, GGTR

COOKS AUTO BODY (Continued) **1000272042**

continued thelateral and vertical delineation of the extent of soil contamination in the vicinity of former product/vent lines and the dispenser island. Handaugured borings were used to collect the soil samples at locations SB-11, SB-PL2A-E, SBPL2A- S, and SB-PL2D. Soil samples were collected from the borings for the laboratory analysis of lead, zinc, SVOCs, and TPH as Motor Oil. Due to difficult subsurface conditions, percussion drilling equipment was subsequently used to collect soil samples from borings SB-10, SBPL2A-NW, SB-PL2D-NW, and SB-PL2D-S. Boring SB-11 was proposed to a depth of five feet but encountered drilling refusal on concrete debris just below collection of the two foot soil sample. Between April 2003 and February 2004, EnviroVision conducted four consecutive quarterly monitoring and sampling events for the three onsite wells MW-1, MW-2, and MW-3. Additional details of each monitoring event are provided in respective reports issued by EnviroVision. Based on review of the EnviroVision March 2004 Groundwater Monitoring Report, the GPP in a letter dated May 17, 2004, requested that the quarterly monitoring and sampling frequency be reduced to semi-annual events (first and third quarters). Upon completing the installation of monitoring wells MW-4 and MW-5, GGTR conducted semiannual monitoring and sampling events for the five monitor wells between September 2004 and September 2006. GGTR in conjunction with Dysert Environmental, Inc., conducted semi-annual groundwater monitoring and sampling activities on March 27, 2007 for all six monitor wells at the Site. On March 14, 2007, Golden Gate Tank Removal, Inc. (GGTR) recovered five discrete soil samples using hand auger equipment from the former product/vent line removal trenches. The concrete surface was cored to allow hand-auger equipment to drill a 6-inch deep hole. Soil samples were recovered from a depth of 6-12 inches at each location using a slide hammer and brass sample liners. Between December 2007 and October 2008, Golden Gate Tank Removal, Inc. (GGTR) conducted semi-annual monitoring and sampling events for the six monitor wells. A gap in groundwater monitoring occurred from the end of 2008 through 2009. Semi-annual groundwater monitoring resumed at the Site during the first quarter of 2010, and was performed on January 27, 2010 by GGE. GGE submitted the Risk Assessment for Lead in Soil dated December 30, 2009, to address the residual lead-contaminated soil. The majority of the Site is characterized by lead concentrations within the range of expected background values for urban soils. Groundwater is not impacted by dissolved lead and the groundwater does not appear threatened by the residual lead. Two hotspots of lead contamination in soil exist above the residential ESL value of 200 mg/kg and one of the hotspots (at the building corner) exceeds the industrial ESL value of 750 mg/kg. The extent of lead contamination is not completely defined by existing soil sampling and the southern extent of lead in soil contamination beneath the building is not known. Three soil samples contain total lead concentrations above 1000 mg/kg (and elevated soluble lead) and could be considered a hazardous waste if excavated and transported offsite. As noted by the GPP in their April 23, 2008 letter, other areas of the Site with elevated lead concentrations above 100 mg/kg may also contain elevated soluble lead concentrations and upon excavation and profiling for offsite disposal, these soils could be classified as a California hazardous waste requiring special handling/disposal practices with significant increased cost. The Site is in commercial use as an automobile body repair shop and the area of lead impact is completely covered by asphalt/concrete. The current commercial land use at the Site is

COOKS AUTO BODY (Continued) **1000272042**

unlikely to present a complete pathway for the ingestion or inhalation of lead contaminated soil. The elevated concentrations of total lead in soil present a health hazard to children under future redevelopment scenarios involving sensitive land use such as residential, school, etc., where the contaminated soil may be exposed at the surface. Excavation and transport of the contaminated soil offsite to a sensitive land use would also present opportunities for exposure to children. Although no future redevelopment is planned at the Site by the current property owner, management of the lead contaminated soil appears necessary to prevent these potential future exposures, should there be a change in property ownership or redevelopment plans. GPP has indicated it will notify the Redwood City Building Department of the lead in soil condition to inhibit improper management and use of this soil from future re-development activities. GGE also recommended the owner implement a Soil Management Plan to track and manage the contaminated soil during future utility installation or other excavation activities.

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0608183982
Contact Type:	Local Agency Caseworker
Contact Name:	DENO MILANO
Organization Name:	SAN MATEO COUNTY LOP
Address:	2000 ALAMEDA DE LAS PULGAS
City:	SAN MATEO
Email:	dmilano@smcgov.org
Phone Number:	6503726292

Global Id:	T0608183982
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

Status History:

Global Id:	T0608183982
Status:	Completed - Case Closed
Status Date:	03/22/2013

Global Id:	T0608183982
Status:	Open - Case Begin Date
Status Date:	02/21/2001

Global Id:	T0608183982
Status:	Open - Site Assessment
Status Date:	02/21/2001

Global Id:	T0608183982
Status:	Open - Site Assessment
Status Date:	03/14/2005

Global Id:	T0608183982

COOKS AUTO BODY (Continued) **1000272042**

Status: Open - Verification Monitoring
Status Date: 10/27/2010

Regulatory Activities:

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 12/31/2003
Action: Staff Letter - #20031231

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 06/29/2006
Action: Staff Letter - #20060629

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 02/14/2013
Action: Staff Letter - #20130214

Global Id: T0608183982
Action Type: RESPONSE
Date: 08/15/2003
Action: Electronic Reporting Submittal Due

Global Id: T0608183982
Action Type: RESPONSE
Date: 06/15/2004
Action: Monitoring Report - Other

Global Id: T0608183982
Action Type: RESPONSE
Date: 11/15/2004
Action: Monitoring Report - Semi-Annually

Global Id: T0608183982
Action Type: RESPONSE
Date: 11/15/2008
Action: Monitoring Report - Semi-Annually

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 02/06/2003
Action: Staff Letter - #20030206

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 04/09/2003
Action: Staff Letter - #20030409

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 02/26/2004
Action: Staff Letter - #20040226

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 12/28/2005

COOKS AUTO BODY (Continued) **1000272042**

Action: Staff Letter - #20051228

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 08/15/2006
Action: Technical Correspondence / Assistance / Other - #20060815

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 04/23/2008
Action: Staff Letter - #20080423

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 12/14/2006
Action: Staff Letter - #20061214

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 05/20/2008
Action: Staff Letter - #20080520

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 09/11/2006
Action: Meeting

Global Id: T0608183982
Action Type: RESPONSE
Date: 12/31/2010
Action: Correspondence

Global Id: T0608183982
Action Type: RESPONSE
Date: 07/22/2002
Action: Soil and Water Investigation Workplan

Global Id: T0608183982
Action Type: RESPONSE
Date: 11/15/2003
Action: Monitoring Report - Quarterly

Global Id: T0608183982
Action Type: RESPONSE
Date: 02/15/2004
Action: Monitoring Report - Quarterly

Global Id: T0608183982
Action Type: RESPONSE
Date: 08/15/2003
Action: Soil and Water Investigation Report

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 01/22/2007
Action: Staff Letter - #20070122

COOKS AUTO BODY (Continued) **1000272042**

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 09/09/2003
Action: Staff Letter - #20030909

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 07/23/2003
Action: Staff Letter - #20030723

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 05/17/2004
Action: Staff Letter - #20040517A

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 12/13/2004
Action: Technical Correspondence / Assistance / Other - #20041213

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 12/30/2002
Action: Staff Letter - #20021230

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 07/09/2008
Action: Staff Letter - #20080709

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 05/20/2002
Action: Staff Letter - #20020520

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 10/27/2010
Action: Staff Letter - #20101027

Global Id: T0608183982
Action Type: RESPONSE
Date: 08/15/2003
Action: Monitoring Report - Quarterly

Global Id: T0608183982
Action Type: RESPONSE
Date: 02/15/2003
Action: Monitoring Report - Quarterly

Global Id: T0608183982
Action Type: RESPONSE
Date: 05/15/2003
Action: Monitoring Report - Quarterly

Global Id: T0608183982
Action Type: RESPONSE

COOKS AUTO BODY (Continued) **1000272042**

Date: 09/30/2003
Action: Soil and Water Investigation Workplan

Global Id: T0608183982
Action Type: RESPONSE
Date: 02/19/2004
Action: Soil and Water Investigation Workplan - Addendum

Global Id: T0608183982
Action Type: RESPONSE
Date: 05/16/2005
Action: Monitoring Report - Semi-Annually

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 05/31/2012
Action: PRP Search Report

Global Id: T0608183982
Action Type: RESPONSE
Date: 11/26/2002
Action: Soil and Water Investigation Workplan - Addendum

Global Id: T0608183982
Action Type: RESPONSE
Date: 05/26/2003
Action: Soil and Water Investigation Report

Global Id: T0608183982
Action Type: RESPONSE
Date: 01/31/2003
Action: Soil and Water Investigation Workplan - Addendum

Global Id: T0608183982
Action Type: Other
Date: 09/02/2002
Action: Leak Reported

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 06/05/2012
Action: Notice of Violation - #20120605

Global Id: T0608183982
Action Type: RESPONSE
Date: 05/15/2011
Action: Monitoring Report - Annually

Global Id: T0608183982
Action Type: RESPONSE
Date: 05/15/2012
Action: Monitoring Report - Annually

Global Id: T0608183982
Action Type: RESPONSE
Date: 10/31/2012
Action: Well Destruction Report

COOKS AUTO BODY (Continued) **1000272042**

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 10/24/2002
Action: Staff Letter - #20021024

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 07/17/2003
Action: Staff Letter - #20030717

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 03/14/2005
Action: Staff Letter - #20050314

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 06/05/2002
Action: Notice of Responsibility - #20020605

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 05/17/2004
Action: Staff Letter - #20040517B

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 01/31/2013
Action: Notice of Violation - #20130131

Global Id: T0608183982
Action Type: RESPONSE
Date: 05/15/2009
Action: Monitoring Report - Semi-Annually

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 08/05/2009
Action: Staff Letter - #20090805

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 05/25/2004
Action: Staff Letter - #20040525

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 10/07/2009
Action: Notice of Violation - #20091007

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 10/28/2009
Action: Technical Correspondence / Assistance / Other - #20091028

Global Id: T0608183982
Action Type: ENFORCEMENT

COOKS AUTO BODY (Continued) **1000272042**

Date: 03/01/2006
Action: Notice of Violation - #20060301

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 11/22/2006
Action: Technical Correspondence / Assistance / Other - #20061122

Global Id: T0608183982
Action Type: RESPONSE
Date: 05/15/2004
Action: Monitoring Report - Quarterly

Global Id: T0608183982
Action Type: RESPONSE
Date: 05/30/2002
Action: Unauthorized Release Form

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 07/24/2012
Action: Referral to Other State Agency - #20120724

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 03/22/2013
Action: Closure/No Further Action Letter - #20130322

Global Id: T0608183982
Action Type: RESPONSE
Date: 05/15/2010
Action: Monitoring Report - Semi-Annually

Global Id: T0608183982
Action Type: RESPONSE
Date: 05/27/2005
Action: Electronic Reporting Submittal Due

Global Id: T0608183982
Action Type: RESPONSE
Date: 06/09/2005
Action: Soil and Water Investigation Workplan

Global Id: T0608183982
Action Type: RESPONSE
Date: 01/18/2007
Action: Soil and Water Investigation Report

Global Id: T0608183982
Action Type: RESPONSE
Date: 10/02/2006
Action: Soil and Water Investigation Workplan - Addendum

Global Id: T0608183982
Action Type: RESPONSE
Date: 06/09/2008
Action: Other Report / Document

COOKS AUTO BODY (Continued) **1000272042**

Global Id: T0608183982
Action Type: RESPONSE
Date: 11/19/2008
Action: Risk Assessment Report

Global Id: T0608183982
Action Type: Other
Date: 02/21/2002
Action: Leak Discovery

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 07/19/2012
Action: Staff Letter - #20120719

Global Id: T0608183982
Action Type: RESPONSE
Date: 11/15/2009
Action: Monitoring Report - Semi-Annually

Global Id: T0608183982
Action Type: RESPONSE
Date: 11/19/2008
Action: Soil and Water Investigation Report

Global Id: T0608183982
Action Type: RESPONSE
Date: 09/13/2004
Action: Soil and Water Investigation Report

Global Id: T0608183982
Action Type: RESPONSE
Date: 11/15/2005
Action: Monitoring Report - Semi-Annually

Global Id: T0608183982
Action Type: RESPONSE
Date: 05/15/2006
Action: Monitoring Report - Semi-Annually

Global Id: T0608183982
Action Type: RESPONSE
Date: 05/15/2007
Action: Monitoring Report - Semi-Annually

Global Id: T0608183982
Action Type: RESPONSE
Date: 05/15/2008
Action: Monitoring Report - Semi-Annually

Global Id: T0608183982
Action Type: RESPONSE
Date: 11/15/2006
Action: Monitoring Report - Semi-Annually

Global Id: T0608183982
Action Type: RESPONSE

COOKS AUTO BODY (Continued) **1000272042**

Date: 11/15/2007
Action: Monitoring Report - Semi-Annually

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Preliminary site assessment underway
Case Number: 330188
How Discovered: SA
Leak Cause: Unknown
Leak Source: Unknown
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: 2/21/2001
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

SAN MATEO CO. LUST:
Region: SAN MATEO
Facility ID: 330188
Facility Status: 9- Case Closed
Global ID: T0608183982
APN Number: 053138010
Case Type: SAN MATEO CO. LUST
EDR Link ID: SAN MATEO CO. LUST

FINDS:

Registry ID: 110001168888

Environmental Interest/Information System

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZARDOUS AIR POLLUTANT MAJOR

STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

COOKS AUTO BODY (Continued) **1000272042**

ECHO:
Envid: 1000272042
Registry ID: 110001168888
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110001168888

17
West
1/2-1
0.996 mi.
5260 ft.

Relative:
Higher

Actual:
173 ft.

OAK KNOLL STATION **Notify 65** **U000059129**
590 CANYON ROAD **N/A**
REDWOOD CITY, CA 92257

NOTIFY 65:
Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Issue Date: Not reported
Incident Description: Not reported

Count: 2 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
REDWOOD CITY	S109149555	SEQUOIA ALTERNATIVE SCHOOL	435, 455, 461 5TH AVENUE AND 4	94063	ENVIROSTOR, SCH
REDWOOD CITY	S105954452	SEQUOIA STATION SHOPPING CENTER	INTERSECTION OF EL CAMINO REAL	94063	ENVIROSTOR

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/05/2017
Date Data Arrived at EDR: 04/21/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 21

Source: EPA
Telephone: N/A
Last EDR Contact: 04/21/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 04/05/2017
Date Data Arrived at EDR: 04/21/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 21

Source: EPA
Telephone: N/A
Last EDR Contact: 04/21/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/05/2017
Date Data Arrived at EDR: 04/21/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 21

Source: EPA
Telephone: N/A
Last EDR Contact: 04/21/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/07/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 92

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 04/07/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 02/07/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 16

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/21/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 02/07/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 16

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/25/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/28/2016
Date Data Arrived at EDR: 01/04/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 93

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 05/15/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 11/15/2016
Date Data Arrived at EDR: 11/29/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 66

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/31/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 11/15/2016
Date Data Arrived at EDR: 11/29/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 66

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/31/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/26/2016
Date Data Arrived at EDR: 09/29/2016
Date Made Active in Reports: 11/11/2016
Number of Days to Update: 43

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 03/29/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Annually

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 01/30/2017
Date Data Arrived at EDR: 01/31/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 112

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 01/30/2017
Date Data Arrived at EDR: 01/31/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 112

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 02/13/2017
Date Data Arrived at EDR: 02/15/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 76

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 05/17/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)
Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/13/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 49
Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 03/14/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Quarterly

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22
Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35
Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14
Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List
Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30
Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29
Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Varies

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/14/2016
Date Data Arrived at EDR: 01/27/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 98

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Semi-Annually

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/07/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Quarterly

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/06/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Quarterly

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 10/01/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/17/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 09/01/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

SLIC: Statewide SLIC Cases (GEOTRACKER)
Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/13/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 49
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/14/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35
Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36
Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11
Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17
Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Annually

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55
Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 04/11/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Varies

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 03/12/2017
Date Data Arrived at EDR: 03/16/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 57
Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 03/16/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69
Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 03/24/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Quarterly

INDIAN UST R5: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 01/14/2017
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 10/01/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Semi-Annually

INDIAN UST R7: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/01/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/17/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 10/06/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Quarterly

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 10/14/2016
Date Data Arrived at EDR: 01/27/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 98

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Semi-Annually

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 10/07/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Quarterly

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 03/27/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 01/30/2017
Date Data Arrived at EDR: 01/31/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 112

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Quarterly

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 01/03/2017
Date Data Arrived at EDR: 01/04/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 57
Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 03/29/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 03/02/2017
Date Data Arrived at EDR: 03/02/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 36
Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/02/2017
Next Scheduled EDR Contact: 07/03/2017
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database
Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30
Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 03/13/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 50
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/14/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 01/13/2017
Date Data Arrived at EDR: 01/17/2017
Date Made Active in Reports: 05/31/2017
Number of Days to Update: 134
Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 05/15/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52
Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 05/01/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Varies

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39
Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137
Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176
Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 09/30/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 36
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/28/2017
Next Scheduled EDR Contact: 06/12/2017
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database
The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 01/30/2017
Date Data Arrived at EDR: 01/31/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 112

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 03/17/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 54

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 04/10/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/30/2016
Date Data Arrived at EDR: 12/05/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 67

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/31/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 03/09/2017
Date Data Arrived at EDR: 03/17/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 67

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database
The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CA FID UST: Facility Inventory Database
The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing
A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 03/06/2017
Date Data Arrived at EDR: 03/07/2017
Date Made Active in Reports: 04/21/2017
Number of Days to Update: 45

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014
Date Data Arrived at EDR: 03/18/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 37

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 04/21/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 03/06/2017
Date Data Arrived at EDR: 03/07/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 77

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 03/07/2017
Next Scheduled EDR Contact: 06/19/2017
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/28/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 37

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 03/29/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Annually

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/06/2016
Date Data Arrived at EDR: 01/25/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 105

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/13/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 49

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/14/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/13/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 49

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/14/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Varies

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015
Date Data Arrived at EDR: 07/08/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 02/24/2017
Next Scheduled EDR Contact: 06/05/2017
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/14/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/14/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63
Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/19/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 02/13/2017
Date Data Arrived at EDR: 02/15/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 86
Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 05/17/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88
Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 05/08/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6
Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/15/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 14
Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/24/2017
Next Scheduled EDR Contact: 07/03/2017
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 11/24/2015
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 133

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 05/26/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/26/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 74

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 03/06/2017
Next Scheduled EDR Contact: 06/19/2017
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 02/01/2017
Date Data Arrived at EDR: 02/09/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/21/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 10/17/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 3
Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 05/09/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 01/20/2016
Date Data Arrived at EDR: 04/28/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 127
Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/10/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 04/10/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 05/19/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 05/19/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016
Date Data Arrived at EDR: 09/08/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 43
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 05/08/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 03/06/2017
Next Scheduled EDR Contact: 06/19/2017
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 03/06/2017
Next Scheduled EDR Contact: 06/19/2017
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 01/04/2017
Date Data Arrived at EDR: 01/06/2017
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 35
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 04/06/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 09/30/2016
Date Data Arrived at EDR: 11/18/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 77

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 03/27/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 02/24/2015
Date Made Active in Reports: 09/30/2015
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 05/26/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/14/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 12/23/2016
Date Data Arrived at EDR: 12/27/2016
Date Made Active in Reports: 02/17/2017
Number of Days to Update: 52

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 12/05/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 04/21/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 03/07/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 03/07/2017
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/08/2017
Date Data Arrived at EDR: 02/28/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 38

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 05/31/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/31/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 03/14/2017
Date Data Arrived at EDR: 03/17/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 21

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 03/13/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 04/04/2017
Date Data Arrived at EDR: 04/07/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 35

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 04/07/2017
Next Scheduled EDR Contact: 06/19/2017
Data Release Frequency: Quarterly

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 03/19/2017
Date Data Arrived at EDR: 03/21/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 03/21/2017
Next Scheduled EDR Contact: 07/03/2017
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 10/25/2015
Date Data Arrived at EDR: 01/29/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 67

Source: Department of Defense
Telephone: 571-373-0407
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

DOCKET HWC: Hazardous Waste Compliance Docket Listing
A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 06/02/2016
Date Data Arrived at EDR: 06/03/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 91
Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing
This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/22/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 79
Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan
Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6
Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 12/28/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 64
Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 03/29/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Quarterly

DRYCLEANERS: Cleaner Facilities
A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 03/09/2017
Date Data Arrived at EDR: 04/11/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 42
Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Annually

EMI: Emissions Inventory Data
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 09/23/2016
Date Made Active in Reports: 10/24/2016
Number of Days to Update: 31
Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 03/21/2017
Next Scheduled EDR Contact: 07/03/2017
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 01/23/2017
Date Data Arrived at EDR: 01/27/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 118

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 04/25/2016
Date Data Arrived at EDR: 04/29/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 53

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 02/14/2017
Date Data Arrived at EDR: 02/17/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 97

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 05/15/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 10/12/2016
Date Made Active in Reports: 12/15/2016
Number of Days to Update: 64

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 04/14/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 11/21/2016
Date Data Arrived at EDR: 11/22/2016
Date Made Active in Reports: 01/23/2017
Number of Days to Update: 62

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing
Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 11/21/2016
Date Data Arrived at EDR: 11/22/2016
Date Made Active in Reports: 01/23/2017
Number of Days to Update: 62
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database
A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 04/11/2017
Date Data Arrived at EDR: 04/13/2017
Date Made Active in Reports: 04/26/2017
Number of Days to Update: 13
Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 04/13/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing
A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 09/12/2016
Date Data Arrived at EDR: 09/14/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 30
Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 03/13/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Varies

MWMP: Medical Waste Management Program Listing
The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 12/02/2016
Date Data Arrived at EDR: 12/06/2016
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 86
Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 03/07/2017
Next Scheduled EDR Contact: 06/19/2017
Data Release Frequency: Varies

NPDES: NPDES Permits Listing
A listing of NPDES permits, including stormwater.

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 11/15/2016
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 107
Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 05/17/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing
A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 12/06/2016
Date Data Arrived at EDR: 12/06/2016
Date Made Active in Reports: 03/03/2017
Number of Days to Update: 87
Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 03/07/2017
Next Scheduled EDR Contact: 06/19/2017
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 03/13/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 50
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/14/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 12/16/2016
Date Data Arrived at EDR: 12/22/2016
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 70
Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 04/03/2017
Next Scheduled EDR Contact: 07/03/2017
Data Release Frequency: No Update Planned

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 01/20/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 50
Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 03/14/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water board?s review found that more than one-third of the region?s active disposal pits are operating without permission.

Date of Government Version: 04/15/2015
Date Data Arrived at EDR: 04/17/2015
Date Made Active in Reports: 06/23/2015
Number of Days to Update: 67
Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 04/14/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9
Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Quarterly

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13
Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 03/24/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 04/10/2017
Date Data Arrived at EDR: 04/11/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 31

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 04/10/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Semi-Annually

Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 04/10/2017
Date Data Arrived at EDR: 04/11/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 21

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 04/10/2017
Next Scheduled EDR Contact: 04/24/2047
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA Facility List

Cupa Facility List

Date of Government Version: 03/06/2017
Date Data Arrived at EDR: 03/08/2017
Date Made Active in Reports: 04/14/2017
Number of Days to Update: 37

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA Facility Listing

Cupa facility list.

Date of Government Version: 01/31/2017
Date Data Arrived at EDR: 02/07/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 94

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 04/10/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 03/27/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 02/23/2017
Date Data Arrived at EDR: 02/24/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 77

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Varies

CONTRA COSTA COUNTY:

Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 11/17/2016
Date Data Arrived at EDR: 11/22/2016
Date Made Active in Reports: 01/26/2017
Number of Days to Update: 65

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 05/01/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA Facility List
Cupa Facility list

Date of Government Version: 01/31/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/14/2017
Number of Days to Update: 70

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 05/01/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 02/24/2017
Date Data Arrived at EDR: 02/28/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 73

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 05/01/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 04/06/2017
Date Data Arrived at EDR: 04/07/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 40

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 03/31/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 12/02/2016
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 111

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

HUMBOLDT COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 03/20/2017
Date Data Arrived at EDR: 03/21/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 57

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

IMPERIAL COUNTY:

CUPA Facility List

Cupa facility list.

Date of Government Version: 01/23/2017
Date Data Arrived at EDR: 01/25/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 36

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

INYO COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 03/09/2017
Date Data Arrived at EDR: 03/09/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 77

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 02/07/2017
Date Data Arrived at EDR: 02/10/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 81

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 03/06/2017
Date Data Arrived at EDR: 03/07/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 71

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

LAKE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 01/18/2017
Date Data Arrived at EDR: 01/20/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 41

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 04/17/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 11/30/2016
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 111

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 11/30/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206
Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 03/20/2017
Next Scheduled EDR Contact: 07/03/2017
Data Release Frequency: No Update Planned

HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 11/18/2016
Date Made Active in Reports: 01/23/2017
Number of Days to Update: 66
Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 04/10/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 04/17/2017
Date Data Arrived at EDR: 04/18/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 14
Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 04/18/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Varies

City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2016
Date Data Arrived at EDR: 01/26/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 56
Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 04/17/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Varies

Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 03/29/2016
Date Data Arrived at EDR: 04/06/2016
Date Made Active in Reports: 06/13/2016
Number of Days to Update: 68
Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 04/17/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/17/2017
Date Data Arrived at EDR: 01/18/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 112
Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 04/17/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/09/2017
Date Data Arrived at EDR: 03/10/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 54
Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Annually

City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 01/10/2017
Date Data Arrived at EDR: 01/13/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 110

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 04/10/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 03/03/2017
Date Data Arrived at EDR: 03/07/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 71

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

MARIN COUNTY:

Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 03/31/2017
Date Data Arrived at EDR: 04/06/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 27

Source: Public Works Department Waste Management
Telephone: 415-499-6647
Last EDR Contact: 03/31/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 02/22/2017
Date Data Arrived at EDR: 02/23/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 83

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

MONO COUNTY:

CUPA Facility List
CUPA Facility List

Date of Government Version: 02/21/2017
Date Data Arrived at EDR: 03/02/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 76

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Varies

MONTEREY COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 06/24/2016
Date Data Arrived at EDR: 06/27/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 43

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

NAPA COUNTY:

Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 03/15/2017
Date Data Arrived at EDR: 03/16/2017
Date Made Active in Reports: 05/09/2017
Number of Days to Update: 54

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 02/09/2017
Date Data Arrived at EDR: 02/10/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 96

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 05/01/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 02/06/2017
Date Data Arrived at EDR: 02/10/2017
Date Made Active in Reports: 04/21/2017
Number of Days to Update: 70

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/08/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 11/04/2016
Date Data Arrived at EDR: 11/11/2016
Date Made Active in Reports: 01/23/2017
Number of Days to Update: 73

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/08/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 02/06/2017
Date Data Arrived at EDR: 02/07/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 85
Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/09/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 09/02/2016
Date Data Arrived at EDR: 09/06/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 38
Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 01/31/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 111
Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 04/18/2017
Date Data Arrived at EDR: 04/20/2017
Date Made Active in Reports: 04/21/2017
Number of Days to Update: 1
Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/20/2017
Next Scheduled EDR Contact: 07/03/2017
Data Release Frequency: Quarterly

Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 01/19/2017
Date Data Arrived at EDR: 01/25/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 98
Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/20/2017
Next Scheduled EDR Contact: 07/03/2017
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 11/07/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 56

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/04/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Quarterly

Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 11/08/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 56

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/04/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 11/30/2016
Date Data Arrived at EDR: 02/09/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 105

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 12/09/2016
Date Data Arrived at EDR: 12/13/2016
Date Made Active in Reports: 03/03/2017
Number of Days to Update: 80

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 05/08/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 10/05/2016
Date Data Arrived at EDR: 12/06/2016
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 86

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 03/10/2017
Next Scheduled EDR Contact: 06/19/2017
Data Release Frequency: Quarterly

Solid Waste Facilities
San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2015
Date Data Arrived at EDR: 11/07/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 58
Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

Environmental Case Listing
The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24
Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 03/06/2017
Next Scheduled EDR Contact: 06/19/2017
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

Local Oversite Facilities
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10
Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Quarterly

Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 02/28/2017
Date Data Arrived at EDR: 03/02/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 62
Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 03/21/2017
Date Data Arrived at EDR: 03/23/2017
Date Made Active in Reports: 05/09/2017
Number of Days to Update: 47
Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 03/20/2017
Next Scheduled EDR Contact: 07/03/2017
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 02/21/2017
Date Data Arrived at EDR: 02/21/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 91
Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

SAN MATEO COUNTY:

Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 03/15/2017
Date Data Arrived at EDR: 04/07/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 33
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/09/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Annually

Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/15/2017
Date Data Arrived at EDR: 04/07/2017
Date Made Active in Reports: 04/21/2017
Number of Days to Update: 14
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/27/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28
Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

SANTA CLARA COUNTY:

Cupa Facility List
Cupa facility list

Date of Government Version: 02/22/2017
Date Data Arrived at EDR: 02/23/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 89
Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22
Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13
Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Annually

Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/07/2016
Date Data Arrived at EDR: 11/10/2016
Date Made Active in Reports: 01/24/2017
Number of Days to Update: 75

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 03/14/2017
Date Data Arrived at EDR: 03/17/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 67

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

SOLANO COUNTY:

Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 11/29/2016
Date Data Arrived at EDR: 12/21/2016
Date Made Active in Reports: 12/22/2016
Number of Days to Update: 1

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 03/09/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Quarterly

Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 03/15/2017
Date Data Arrived at EDR: 03/17/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 47

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 03/09/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Quarterly

SONOMA COUNTY:

Cupa Facility List
Cupa Facility list

Date of Government Version: 03/01/2017
Date Data Arrived at EDR: 03/30/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 54

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 03/27/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Varies

Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 01/04/2017
Date Data Arrived at EDR: 01/06/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 55

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 03/27/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 01/20/2017
Date Data Arrived at EDR: 01/24/2017
Date Made Active in Reports: 05/18/2017
Number of Days to Update: 114

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 11/30/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Varies

SUTTER COUNTY:

Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 12/02/2016
Date Data Arrived at EDR: 12/06/2016
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 35

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA Facility List

Cupa facilities

Date of Government Version: 01/05/2017
Date Data Arrived at EDR: 02/10/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 104

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 01/23/2017
Date Data Arrived at EDR: 01/25/2017
Date Made Active in Reports: 05/18/2017
Number of Days to Update: 113

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

TULARE COUNTY:

CUPA Facility List
Cupa program facilities

Date of Government Version: 01/05/2017
Date Data Arrived at EDR: 02/10/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 104

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 01/25/2017
Date Data Arrived at EDR: 01/27/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 34

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 12/27/2016
Date Data Arrived at EDR: 01/27/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 103

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/31/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 05/15/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Quarterly

Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 09/26/2016
Date Data Arrived at EDR: 10/27/2016
Date Made Active in Reports: 01/24/2017
Number of Days to Update: 89

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Quarterly

Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 02/27/2017
Date Data Arrived at EDR: 03/15/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 49
Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/15/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 03/31/2017
Date Data Arrived at EDR: 04/06/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 27
Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 03/31/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Annually

YUBA COUNTY:

CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 01/30/2017
Date Data Arrived at EDR: 01/31/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 112
Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 05/01/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45
Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/15/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 09/29/2016
Date Made Active in Reports: 01/03/2017
Number of Days to Update: 96
Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/11/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/30/2017
Date Data Arrived at EDR: 02/01/2017
Date Made Active in Reports: 02/13/2017
Number of Days to Update: 12

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 05/03/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Annually

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 07/22/2016
Date Made Active in Reports: 11/22/2016
Number of Days to Update: 123

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/18/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 06/19/2015
Date Made Active in Reports: 07/15/2015
Number of Days to Update: 26

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 04/14/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 50

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/13/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Annually

Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data

Source: PennWell Corporation

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.
Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.
Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.
Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish & Game
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

JOHN GILL ELEMENTARY SCHOOL
555 AVENUE DEL ORA
REDWOOD CITY, CA 94062

TARGET PROPERTY COORDINATES

Latitude (North):	37.47439 - 37° 28' 27.80''
Longitude (West):	122.240558 - 122° 14' 26.01''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	567152.2
UTM Y (Meters):	4147566.5
Elevation:	59 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5640620 PALO ALTO, CA
Version Date:	2012
Southwest Map:	5640628 WOODSIDE, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

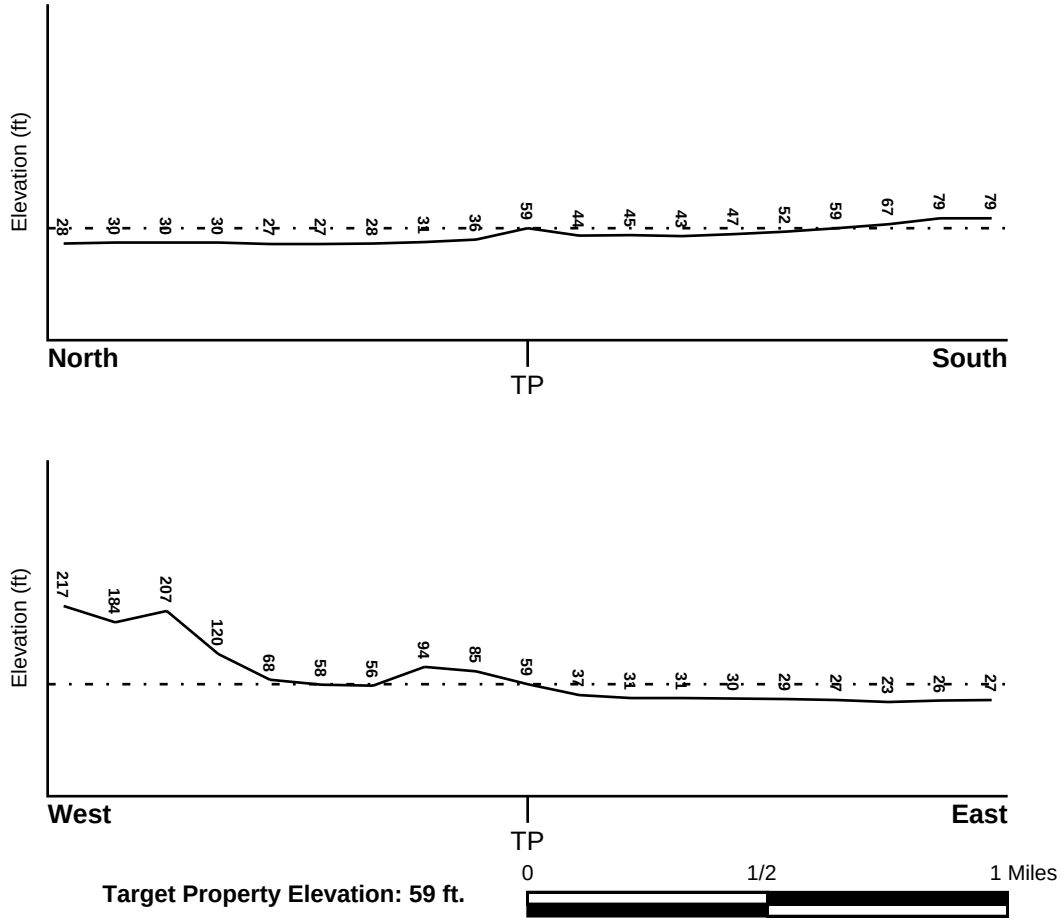
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General ENE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Target Property Elevation: 59 ft.

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06081C0301E	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06081C0282E	FEMA FIRM Flood data
06081C0285E	FEMA FIRM Flood data
06081C0303E	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
PALO ALTO	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
A1	1/4 - 1/2 Mile NNE	NNE
A2	1/2 - 1 Mile NNE	E
B3	1/2 - 1 Mile SE	NE
B4	1/2 - 1 Mile SE	N
5	1/2 - 1 Mile WNW	NE
C6	1/2 - 1 Mile NE	NE

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
D7	1/2 - 1 Mile NE	NNE
C8	1/2 - 1 Mile NE	NE
C9	1/2 - 1 Mile NE	N
D10	1/2 - 1 Mile NE	NE
11	1/2 - 1 Mile ENE	N
E12	1/2 - 1 Mile NE	N
13	1/2 - 1 Mile NNE	SE
14	1/2 - 1 Mile NNW	Not Reported
F15	1/2 - 1 Mile ENE	Not Reported
F16	1/2 - 1 Mile ENE	Not Reported
F17	1/2 - 1 Mile ENE	NE
F18	1/2 - 1 Mile ENE	NNE
E19	1/2 - 1 Mile NE	NE
E20	1/2 - 1 Mile NE	NE
G21	1/2 - 1 Mile NNE	E
G22	1/2 - 1 Mile NNE	NE
H23	1/2 - 1 Mile NE	NW
H24	1/2 - 1 Mile NE	NE
25	1/2 - 1 Mile NE	NE
27	1/2 - 1 Mile North	Varies

For additional site information, refer to Physical Setting Source Map Findings.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

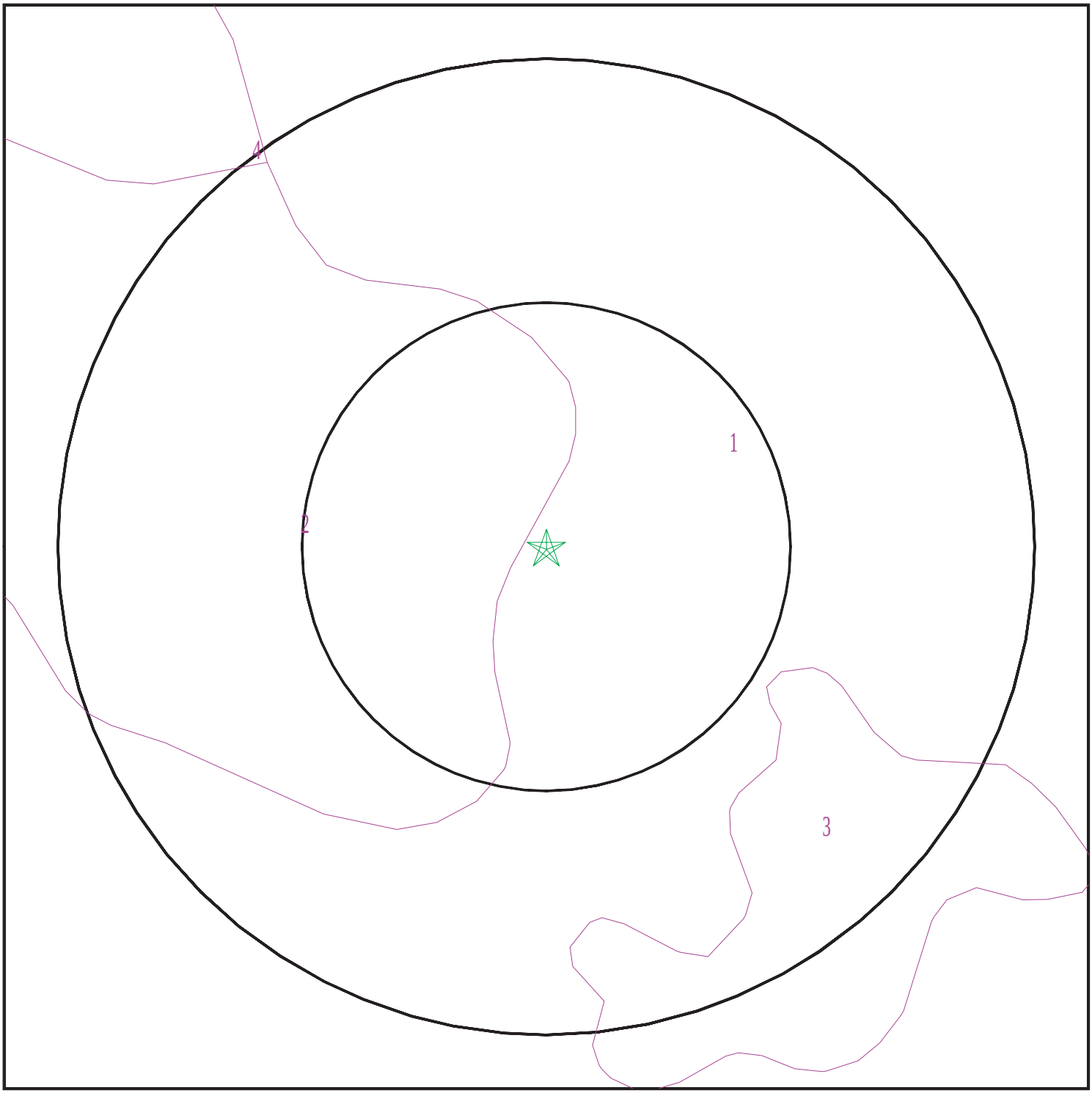
Era:	Paleozoic
System:	Permian
Series:	Ultramafic rocks
Code:	uM *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Plutonic and Intrusive Rocks

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4955887.16s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	John Gill Elementary School	CLIENT:	McCloskey Consultants Inc
ADDRESS:	555 Avenue Del Ora Redwood City CA 94062	CONTACT:	Tom Mccloskey
		INQUIRY #:	4955887.16s
LAT/LONG:	37.47439 / 122.240558	DATE:	June 05, 2017 10:14 am

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Urban land

Soil Surface Texture:
Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class:
Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches		Not reported	Not reported	Max: 0.01 Min: 0	Max: Min:

Soil Map ID: 2

Soil Component Name: Orthents

Soil Surface Texture:
Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	59 inches		Not reported	Not reported	Max: Min:	Max: Min:

Soil Map ID: 3

Soil Component Name: Orthents

Soil Surface Texture: variable

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	59 inches	variable	Not reported	Not reported	Max: Min:	Max: Min:

Soil Map ID: 4

Soil Component Name: Orthents

Soil Surface Texture:

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	59 inches		Not reported	Not reported	Max: Min:	Max: Min:

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 0.001 miles
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

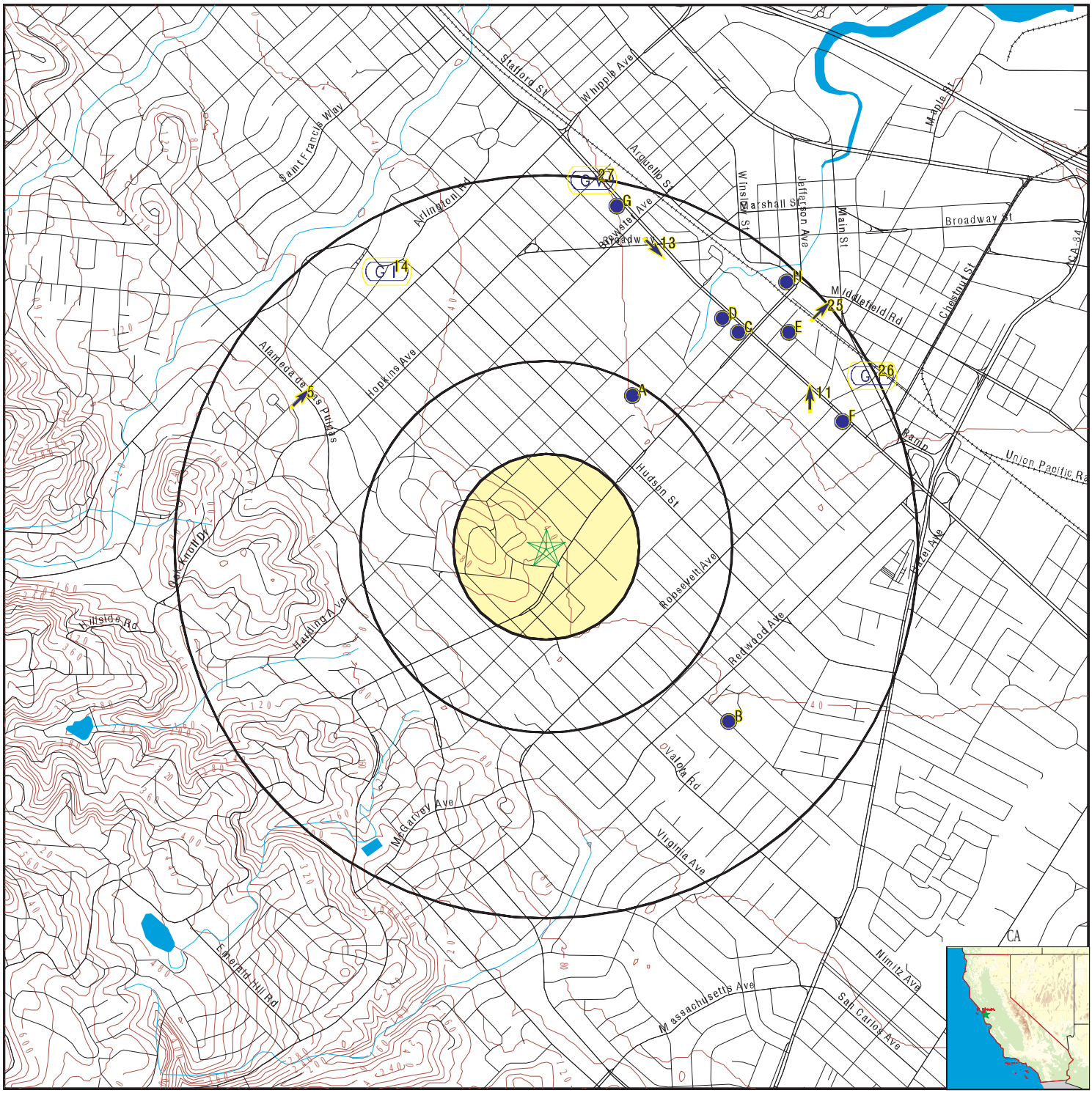
MAP ID	WELL ID	LOCATION FROM TP

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

PHYSICAL SETTING SOURCE MAP - 4955887.16s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME: John Gill Elementary School ADDRESS: 555 Avenue Del Ora Redwood City CA 94062 LAT/LONG: 37.47439 / 122.240558	CLIENT: McCloskey Consultants Inc CONTACT: Tom Mccloskey INQUIRY #: 4955887.16s DATE: June 05, 2017 10:14 am

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
A1 **NNE** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0441 NNE 4.70’ 8.90 Not Reported 03/01/1996	**AQUIFLOW**	**67069**
A2 **NNE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0478 E 1’ 3.5 Not Reported 10/30/1985	**AQUIFLOW**	**67049**
B3 **SE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0521 NE 19.5 24.0 Not Reported 06/05/1992	**AQUIFLOW**	**65874**
B4 **SE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	330024 N 13 15 Not Reported 03/11/1987	**AQUIFLOW**	**66746**
5 **WNW** **1/2 - 1 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0738 NE Not Reported Not Reported 16a 04/20/1993	**AQUIFLOW**	**65501**
C6 **NE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0839 NE 11 14 Not Reported 09/25/1996	**AQUIFLOW**	**65739**
D7 **NE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	330161 NNE 8’ 10’ Not Reported 02/04/1997	**AQUIFLOW**	**66559**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
C8 **NE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	330101 NE 7.37 9.45 Not Reported 06/1995	**AQUIFLOW**	**66727**
C9 **NE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0457 N 8.39 9.85 Not Reported 06/17/1994	**AQUIFLOW**	**66731**
D10 **NE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0185 NE 5.92 8.70 Not Reported 06/29/1992	**AQUIFLOW**	**66135**
11 **ENE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	330059 N Not Reported Not Reported 9.5 09/16/1988	**AQUIFLOW**	**66761**
E12 **NE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0393 N Not Reported Not Reported 11.30 06/19/1992	**AQUIFLOW**	**66566**
13 **NNE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0616 SE 7.00 8.70 Not Reported 05/20/1992	**AQUIFLOW**	**67077**
14 **NNW** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0362 Not Reported 21.5 29 Not Reported 06/01/1994	**AQUIFLOW**	**67086**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
F15 **ENE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	330023 Not Reported Not Reported Not Reported 7.22' 05/22/1990	**AQUIFLOW**	**66585**
F16 **ENE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	330023 Not Reported Not Reported Not Reported 7.22' 05/22/1990	**AQUIFLOW**	**66582**
F17 **ENE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0833 NE 8 9 Not Reported 05/17/1999	**AQUIFLOW**	**65591**
F18 **ENE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0724 NNE Not Reported Not Reported 7.8 a 05/1992	**AQUIFLOW**	**67018**
E19 **NE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	330082 NE 5.87 12 Not Reported 07/07/1997	**AQUIFLOW**	**65732**
E20 **NE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0707 NE 5.87 12 Not Reported 07/07/1997	**AQUIFLOW**	**65733**
G21 **NNE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0341 E 8.85 Not Reported 8.85 03/23/1991	**AQUIFLOW**	**67066**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
G22 **NNE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0454 NE 9.6 10.58 Not Reported 12/22/1992	**AQUIFLOW**	**67073**
H23 **NE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	330135 NW 6.52 7.33 Not Reported 12/1996	**AQUIFLOW**	**66052**
H24 **NE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	330152 NE Not Reported Not Reported 9.5 11/09/1998	**AQUIFLOW**	**67090**
25 **NE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0994 NE Not Reported Not Reported 10a 11/1996	**AQUIFLOW**	**65717**
26 **ENE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0920 Not Reported Not Reported Not Reported 10'a 03/31/1994	**AQUIFLOW**	**66743**
27 **North** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0407 Varies 8.5 12.3 Not Reported 08/1990	**AQUIFLOW**	**65983**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
94062	119	27

Federal EPA Radon Zone for SAN MATEO County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 94062

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	2.000 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish & Game
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779
Oil and Gas well locations in the state.

RADON

State Database: CA Radon
Source: Department of Health Services
Telephone: 916-324-2208
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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Appendix D

Historical Aerial Photographs, Topographic Maps, and City Directory Report

John Gill Elementary School
555 Avenue Del Ora
Redwood City, CA 94062

Inquiry Number: 4955887.17
June 05, 2017

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

06/05/17

Site Name:

John Gill Elementary School
555 Avenue Del Ora
Redwood City, CA 94062
EDR Inquiry # 4955887.17

Client Name:

McCloskey Consultants Inc
420 Sycamore Valley Road West
Danville, CA 94526
Contact: Tom Mccloskey

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by McCloskey Consultants Inc were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # 6F60-4DFA-BF4A

PO # NA

Project John Gill Elementary School

Maps Provided:

1968
1962
1950

Sanborn® Library search results

Certification #: 6F60-4DFA-BF4A

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

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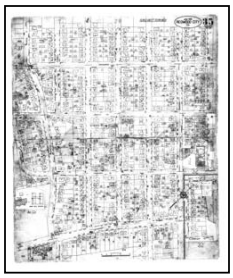
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Sanborn Sheet Key

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

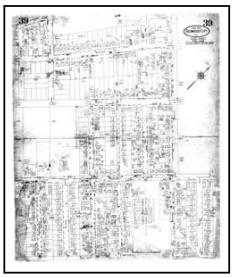
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Volume 1, Sheet 38
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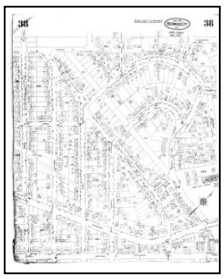


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Volume 1, Sheet 38
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1950 Source Sheets



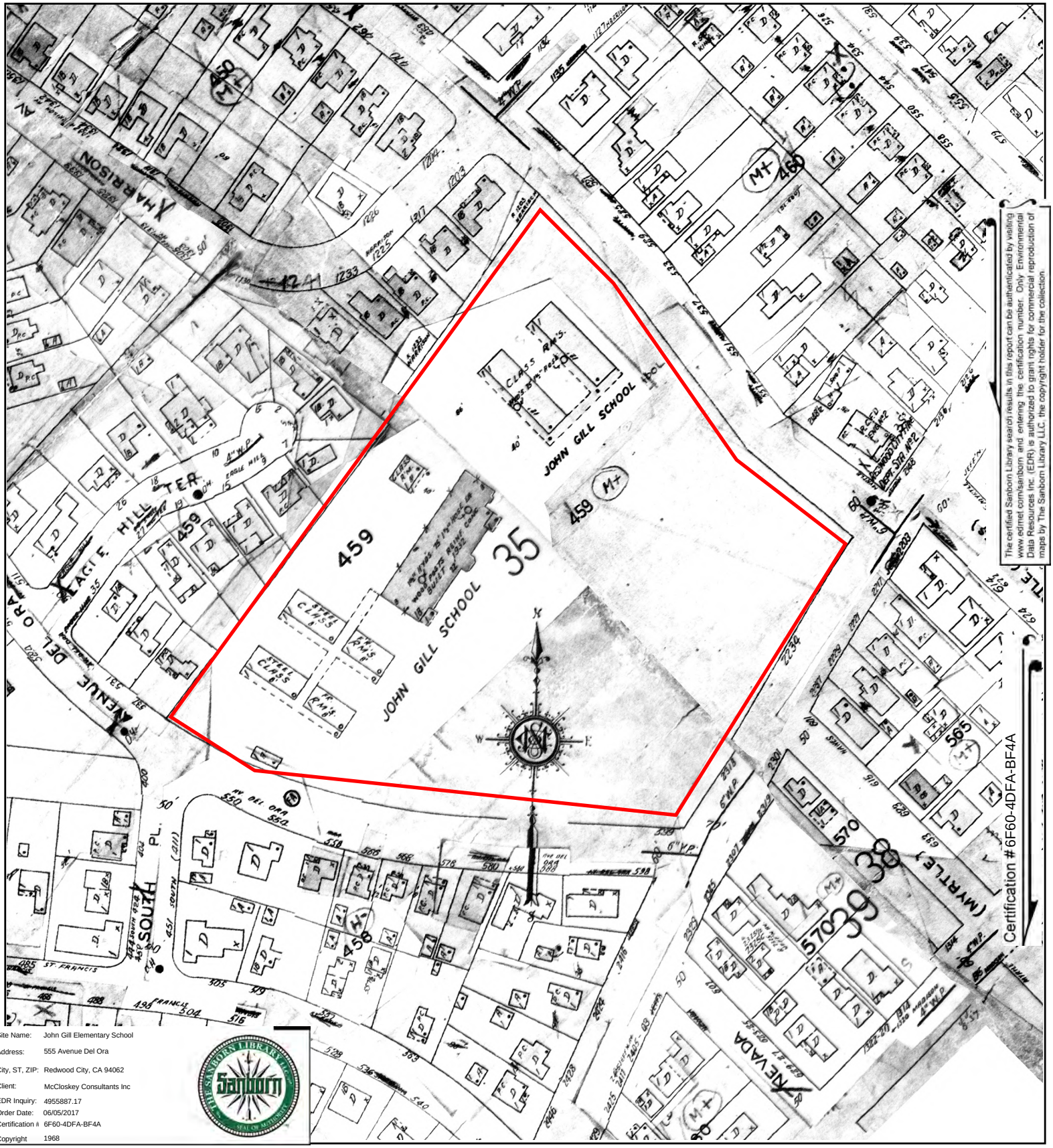
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Volume 1, Sheet 39
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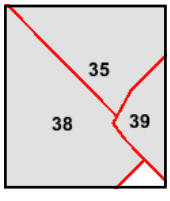
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City, ST, ZIP:	Redwood City, CA 94062
Client:	McCloskey Consultants Inc
EDR Inquiry:	4955887.17
Order Date:	06/05/2017
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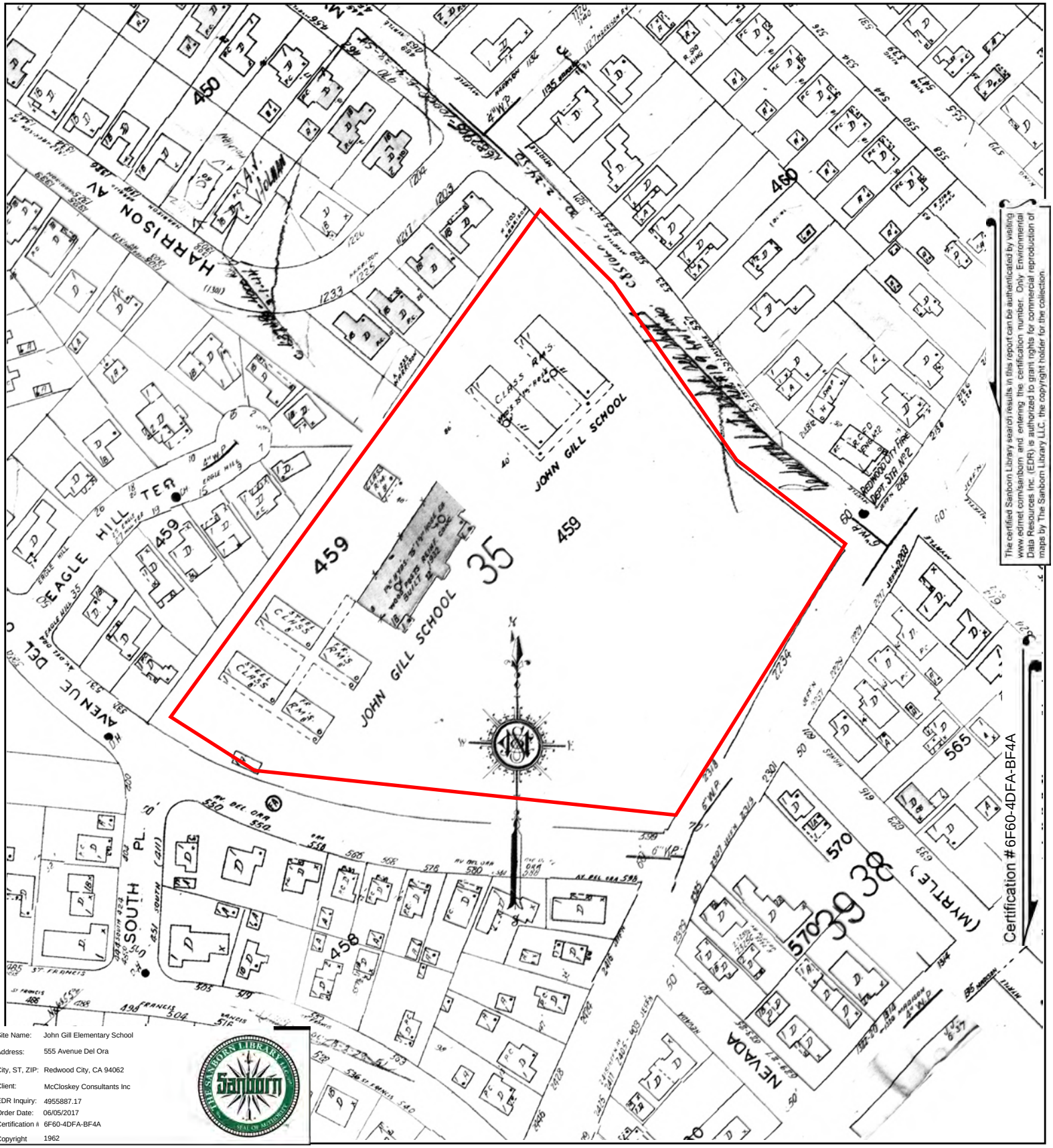
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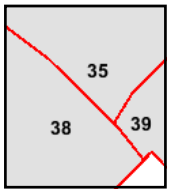


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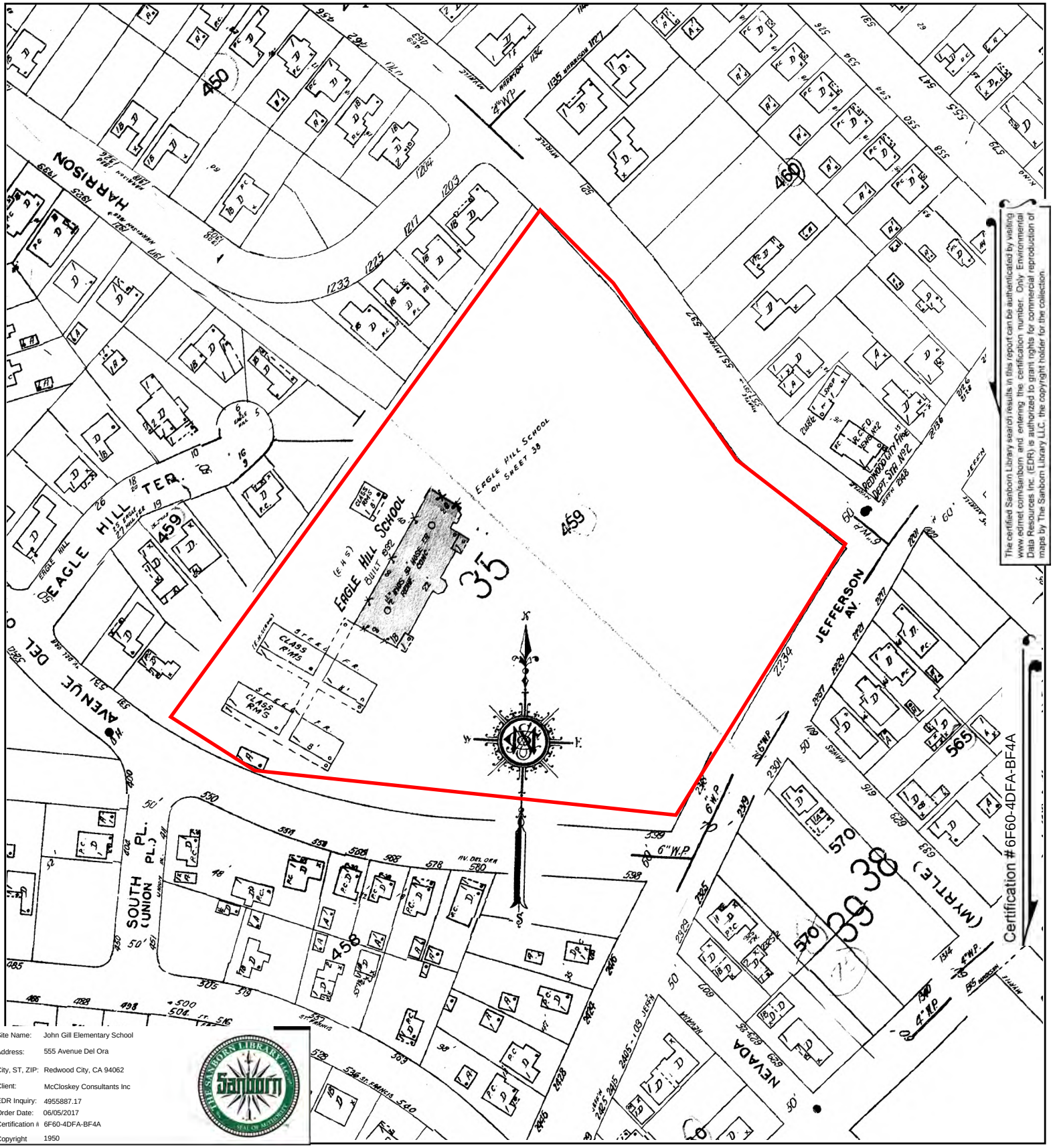
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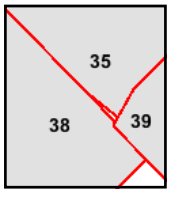
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John Gill Elementary School
555 Avenue Del Ora
Redwood City, CA 94062

Inquiry Number: 4955887.19
June 05, 2017

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

06/05/17

Site Name:

John Gill Elementary School
555 Avenue Del Ora
Redwood City, CA 94062
EDR Inquiry # 4955887.19

Client Name:

McCloskey Consultants Inc
420 Sycamore Valley Road West
Danville, CA 94526
Contact: Tom Mccloskey

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2010	1"=500'	Flight Year: 2010	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2005	1"=500'	Flight Year: 2005	USDA/NAIP
1998	1"=500'	Flight Date: August 27, 1998	USDA
1991	1"=500'	Acquisition Date: October 30, 1991	USGS/DOQQ
1982	1"=500'	Flight Date: July 05, 1982	USDA
1974	1"=500'	Flight Date: June 26, 1974	USGS
1968	1"=500'	Flight Date: June 14, 1968	USGS
1963	1"=500'	Flight Date: June 24, 1963	USGS
1958	1"=500'	Flight Date: July 25, 1958	USGS
1956	1"=500'	Flight Date: September 08, 1956	USGS
1948	1"=500'	Flight Date: September 26, 1948	USDA
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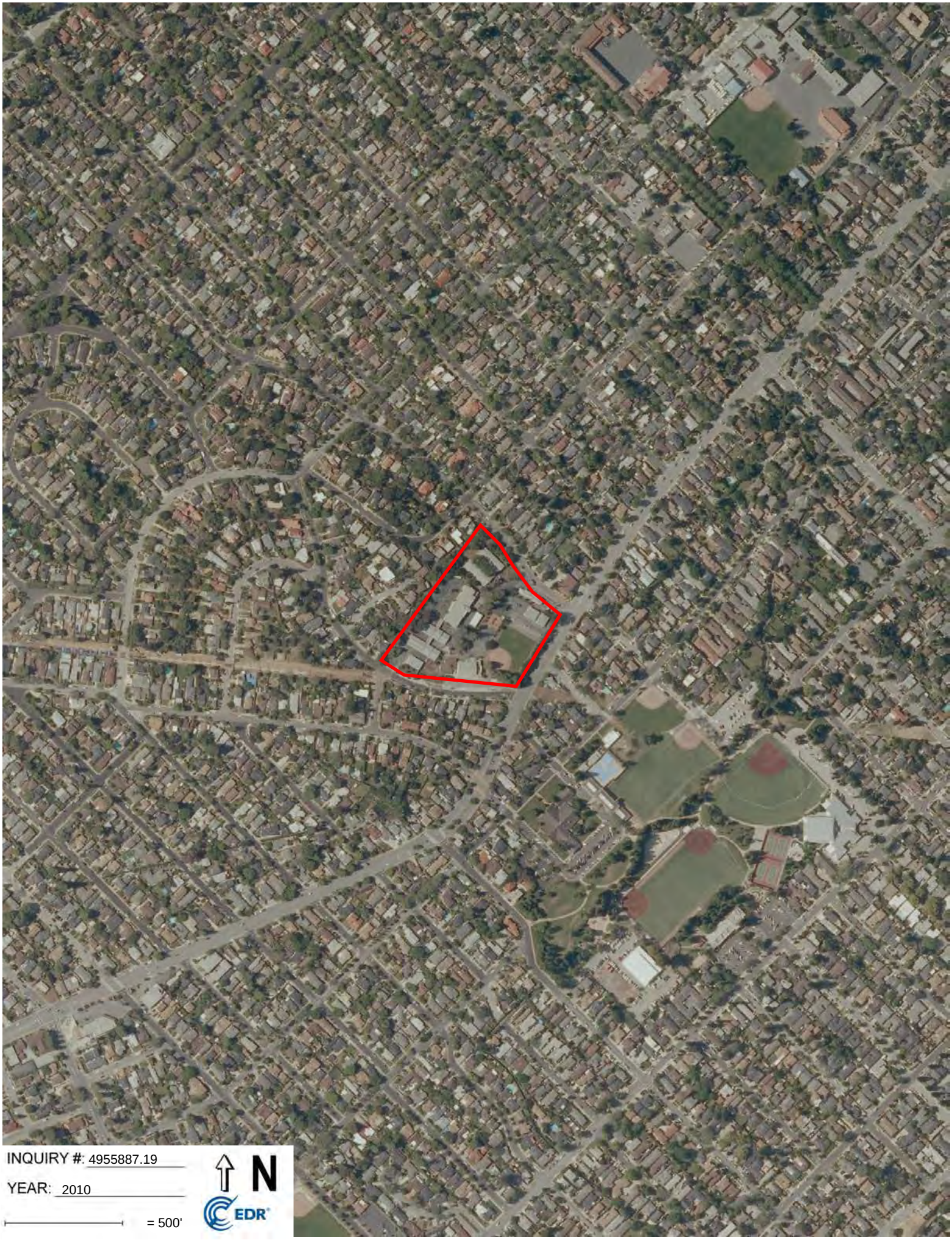
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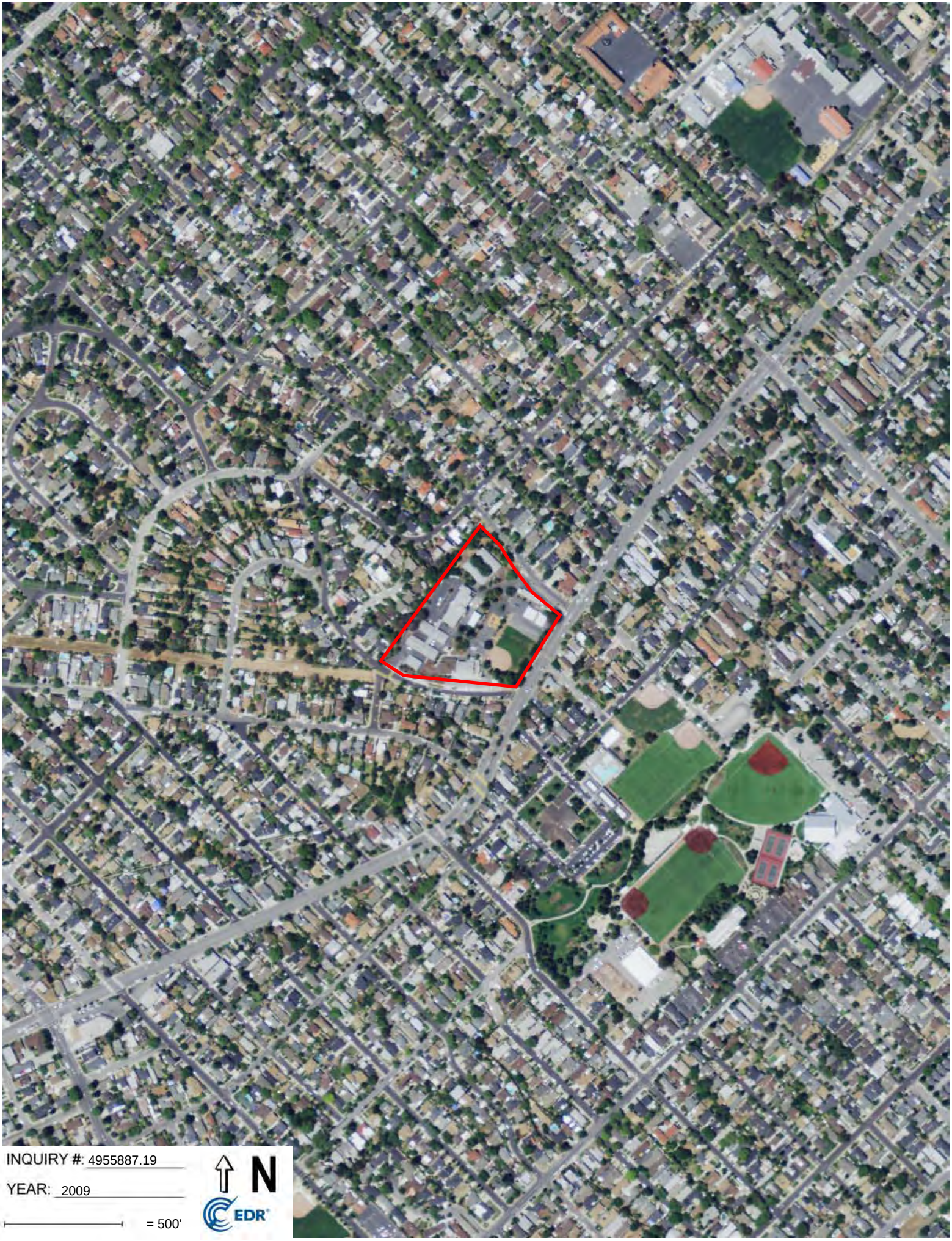
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EDR


INQUIRY #: 4955887.19
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N
EDR

Appendix I
Preliminary Environmental Assessment Workplan

Preliminary Environmental Assessment Workplan, John Gill School Expansion, Redwood City

Prepared for:

Redwood City School District
Redwood City, California

March 30, 2018

Prepared by:
McCloskey Consultants, Inc.



PRELIMINARY ENVIRONMENTAL ASSESSMENT WORKPLAN

JOHN GILL COMMUNITY SCHOOL EXPANSION

555 Avenue Del Ora

Redwood City, California 94062

March 30, 2018

Prepared for:

REDWOOD CITY SCHOOL DISTRICT

Prepared by:

McCloskey Consultants, Inc.

420 Sycamore Valley Road West

Danville, CA 94526

Tina M. Hariu, P.G., C.Hg.

Senior Geologist

Thomas F. McCloskey, P.G., C.E.G., C.Hg.

President and Principal Geologist

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1.0 INTRODUCTION

On behalf of the Redwood City School District (RCSD), McCloskey Consultants, Inc. (MCI) has prepared this Preliminary Environmental Assessment (PEA) Work Plan for the proposed renovation/redevelopment of the southern portion of the existing John Gill School located at 555 Avenue Del Ora, in Redwood City, San Mateo County, California (the "Site") (Figure 1). Redwood City is located on the east side of San Mateo County, along the western margin of the San Francisco Bay.

MCI understands that current redevelopment plans include: (1) demolition of two permanent classroom buildings, a portable building, and an existing elevator building; (2) construction of a new two-story classroom building in place of the existing buildings; and (3) construction of a new lunch shelter east of the existing elevator building. The expansion will include the addition of four classrooms, with an expected increase in student population by approximately 100 students. The driveway entrance to the school from Avenue Del Ora will be reconfigured and the parking spaces relocated.

A Site visit and Scoping Meeting was performed on December 13, 2017. Participants included Mellan Songco (Department of Toxic Substances Control [DTSC], Schools Program Project Manager), Vivek Mathrani (DTSC Toxicologist), Donald Dias (Bond Program Director), William Robertson (RGM and Associates), Regina Bills-Dacong (School Site Solutions), and Tom McCloskey (McCloskey Consultants). The Site conditions and history was reviewed based on a previous Phase I Environmental Site Assessment (McCloskey, 2017) and four potential areas of environmental interest were identified and confirmed in that meeting:

- Current and Historical Structures – Lead-based paint (LBP) (pre-1993 structures), organochlorine pesticides (OCPs) and herbicides (pre-1989 structures), and polychlorinated biphenyls (PCBs; in window caulking/glazing) (structures constructed between 1950 to 1979);
- Naturally Occurring Asbestos (NOA) – Associated with degradation of ultramafic rocks;
- A Pad-Mounted Transformer – Potentially containing PCB-laden oil;
- A Hydraulic Elevator – Potentially containing PCB-containing oil; and,
- Radon gas – Associated with decay of naturally-occurring radium.

In this document the potential environmental concerns identified will be evaluated for their potential for health impacts at the Site.

1.1 Purpose

Under Senate Bill 475 (1989), the preparation of a PEA is a formal step in the site evaluation process of the DTSC School Site Mitigation Unit. The purpose of a PEA Workplan is to describe how site sampling and analyses will be performed to determine if current or past hazardous materials management practices have resulted in the release of hazardous materials, and if naturally-occurring hazardous materials are present. If conditions exist that could pose a threat, a risk analysis must be performed in the PEA to determine if their presence represents a threat to children's health or learning abilities, site workers health, or the environment.

1.2 Scope of Work

The scope of work for the Site evaluation is described in detail in Section 6.0 and is based on the evaluation of current and historical Site uses and practices that may have resulted in the release of contaminants that could remain in soils at elevated concentrations. The methods used to develop the scope of work included a review of an environmental database, review of historical air photographs, interviews with Site representatives, a Site reconnaissance, the previously mentioned Scoping Meeting with the DTSC, and the use of several DTSC Schools Program site sampling guidance documents, including the following key documents:

- *Preliminary Endangerment Assessment Guidance Manual,* latest revision October 2015;
- *Interim Guidance, Evaluation of School Sites with Potential Soil Contamination as a Results of Lead from Lead-Based Paint, Organochlorine Pesticides from Termiticides, and Polychlorinated Biphenyls from Electrical Transformers,* latest update September 12, 2006;
- *Interim Guidance for Sampling Agricultural Properties (Third Revision),* latest update August 7, 2008;
- *Interim Guidance Naturally-Occurring Asbestos (NOA) at School Sites,* latest revision September 24, 2004; and,
- *Arsenic Strategies, Determination of Arsenic Remediation, Development of Arsenic Cleanup Goals* (January 16, 2009).

The sampling to be performed at the PEA level is a one-time sampling of surface and subsurface soil, and potentially groundwater and soil vapor, depending on site conditions. The objective of the sampling is to evaluate the nature and concentrations of contaminants that may be present at the site. It should be noted that additional rounds of sampling via a Supplemental Site Investigation (SSI) may be necessary to fully characterize the extent of contamination, if any is identified, that represents a potential health risk. Once the sampling results are obtained, an assessment of the potential threat to human health and the environment will be performed using screening evaluations. Exposure routes will first be identified, and then potential threats will be

estimated using DTSC methods that may vary depending on the sampling results. The DTSC toxicologist will be contacted and an agreement reached on the appropriate methods, in the unlikely event that a detailed risk assessment is warranted.

2.0 SITE DESCRIPTION

2.1 Site and Vicinity

The Site is an irregularly-shaped area within the larger John Gill School parcel designated by the San Mateo County Assessor's Office (SMCAO) as assessor's parcel number (APN) 058-161-390 (Figure 2). The parcel (including the Site) is approximately 6.90 acres (300,564 square feet). The Site itself is comprised of 1.19 acres. The school is located in a residential area of Redwood City, approximately 1 mile west of U.S. Highway 84, and 1.5 miles southwest of U.S. Highway 101.

Non-Site portions of John Gill School border the Site on the north and east (Figure 2). The school parcel is bounded by Harrison Avenue and Myrtle Street on the north, Jefferson Avenue on the east, the Avenue Del Ora on the south, and Eagle Hill Terrace on the west.

Site topography slopes moderately toward the east and northeast. The vicinity topography slopes gently toward the northeast. The ground surface elevation at the Site is approximately 60 feet above mean sea level (Appendix A).

2.1.1 Site Information

The Site information provided herein is based on the results of the Phase I Environmental Site Assessment (ESA) conducted by MCI in 2017 (McCloskey, 2017), information obtained in recent reviews of historical and Google Earth aerial photographs (Appendix B), and a Site visit conducted as part of the PEA work plan preparation.

The Site boundary shown on Figure 2 is approximated, and the area includes:

- Two permanent classroom buildings connected by a covered breezeway (constructed in 1947);
- A portable classroom/art building (constructed in 1968);
- An elevator building with a hydraulic (hydroelectric) elevator (constructed in 2000);
- Several unpaved landscaped areas with exposed soil;
- Asphalt- and concrete-paved play areas; and,
- Parking areas and a driveway.

The Site was first developed in 1947 with two adjacent, rectangular-shaped classrooms. Historical aerial photographs up to 1963 suggest the ground surface surrounding the original

structures was unpaved at that time; however, the resolution and clarity of the photographs limits identification of pavement versus unpaved surfaces (Appendix B). The portable classroom/ art building was reportedly constructed in 1968 but is not readily identifiable in the 1968 aerial photograph. The Site appears fully paved by 1968, except for adjacent to the south side of the portable classroom/ art building. Aerial photographs from 1974 and beyond indicate the Site is mostly paved, except for several small landscaped areas containing shrubs and trees currently observed adjacent to the buildings.

Currently, soil is exposed on the western sides of both permanent classroom structures, on the northern side of the northern permanent structure, on the southern side of the portable classroom/ art building, and adjacent to an older building (Building A) that will be encroached upon during construction. The remaining areas of the Site currently are paved with asphalt.

2.1.2 Historic Structure

Historical aerial photographs indicate a small structure (a reported garage) had been constructed along the Avenue Del Ora near the time the school was first developed (Figure 2). By 1968, the garage had been removed and the portable classroom and art structure had been constructed south of the permanent classroom structures. The elevator building was reportedly added east of the portable structure in 2000.

Additionally, a small structure was observed east of the portable classroom/art building in historical aerial photographs from 1991 and 1998 (the structure had been removed by 2005).

2.1.3 Hydraulic Elevator

According to the Phase I ESA, no evidence of leaks or releases of hydraulic fluid in the elevator building was observed at the time of the Site reconnaissance. Based on the age of the elevator (constructed in 2000), PCBs are not expected to be present in the hydraulic fluids because they were banned in 1978 from all uses. Water is reportedly pumped from the elevator sump and stored in 55-gallon drums until disposed.

2.1.4 Transformer

A Pacific Gas and Electric Company (PG&E) pad-mounted transformer (T-5348) is located in the southwest corner of the Site adjacent to the Avenue Del Ora (Figure 2). No indication of releases from the transformer was observed during the Site reconnaissance conducted by MCI as part of the Phase I ESA. PG&E has been contacted and this transformer was reportedly manufactured in 1998 and is clearly marked inside the cabinet with a sticker that reads (Filled with NON-PCB Mineral Oil at Time of Manufacture."

Drinking water is supplied to the Site by the Hetch Hetchy regional water system and no wells have been identified at the Site. No evidence of underground storage tanks (USTs) at the Site has been identified (McCloskey, 2017).

2.2 Geology and Hydrogeology

Redwood City is located in the eastern portion of San Mateo County, along the western margin of the San Francisco Bay. San Mateo County is located in the Coast Ranges Geomorphic Province, which is characterized by northwest-southeast trending mountain ranges and valleys subparallel to the San Andreas Fault. The Site is located within the Santa Clara Valley Groundwater Basin, San Mateo Plain Subbasin (Subbasin). The aquifer system in the Subbasin consists of the Santa Clara Formation and Quaternary-age alluvial deposits. The Santa Clara Formation is comprised of Plio-Pleistocene-Age materials. The Quaternary alluvium is the most significant water-bearing formation in the Subbasin.

The California Department of Conservation General Location Guide for Ultramafic Rocks in California was reviewed to evaluate the presence of potential NOA in the immediate vicinity of the Site. The nearest outcrop of ultramafic rock that could contain NOA reportedly is approximately 2 miles west of the Site (California Department of Conservation, 2000). This is within the 10-mile distance established by the DTSC Schools Program guidelines which triggers sampling for NOA fibers.

Vicinity hydrogeological information obtained from the State Water Resources Control Board (SWRCB) GeoTracker database indicates that first groundwater is encountered at depths ranging from approximately 11 to 14 feet below ground surface (bgs). The groundwater flow direction likely follows the local topographic slope toward the northeast.

2.3 Soils

Based on information contained in the Environmental Data Resources Radius Map™ Report with Geocheck® (EDR Radius Report) prepared for the Phase I ESA, soils in the vicinity of the Site are categorized by the USDA Soil Conservation Service as Orthents and Urban Land. The EDR Radius Report is provided in Appendix A for reference purposes.

Orthents soils are moderately-well and well-drained, with moderately coarse textures and moderate infiltration rates. Urban Land soils are partially hydric, clayey soils with a high water table, or located shallow to an impervious layer, having very slow infiltration rates (EDR, 2017).

3.0 SITE BACKGROUND

3.1 Operational History and Status

3.1.1 Prior Site Land Use

According to information obtained in the Phase I ESA, the original Eagle Hill School building was constructed in 1931 in an area on the school parcel north of the Site (McCloskey, 2017). The Site has been utilized for educational purposes since that time.

Based on available information, the Site does not appear to have been utilized for agricultural purposes such as row crops or orchards within the timeframe of the historical documentation.

3.1.2 Property Ownership

Original ownership of the property (including the Site) has not been established. The school property (including the Site) has been continuously owned by the Redwood City School District since construction of the Eagle Hill School in 1931. The name of the school was changed to John Gill School in 1962.

3.1.3 Prior Surrounding Land Use

As stated, the area north of the Site was first developed in 1931 as the Eagle Hill School (McCloskey, 2017). As early as 1943, the adjoining (school) property east of the Site appeared to contain a sports' field and an open area that remained undeveloped until the 1970s. Aerial photographs indicate adjoining properties south and southwest of the Site were mostly developed with residences by 1943. The adjoining properties on the west were partially developed with residences, and by the late 1950s, were fully developed with residences.

3.2 Hazardous Substance/Waste Management Information

3.2.1 Site Activities

According to interviews conducted with Mr. Dias during the Phase I ESA, the school utilizes minimal quantities (i.e., less than one-gallon containers) of assorted janitorial materials and paints. Occasionally, chemicals are used for custodial cleaning, periodic weed and broad leaf control, and fertilizing plants. Following cleaning, "custodial green" cleaners, such as Suprox® and hydrogen peroxide, are disposed to the sanitary sewer. Chemical waste (such as paint) reportedly is stored at the RCSD corporation yard prior to disposal by a licensed transporter.

Mr. Dias was not aware of any indications of contamination on the Site, and reported no knowledge of environmental cleanup liens, activity and land use limitations, or pending, threatened or past litigation or administrative proceedings related to hazardous substances or

petroleum products at the Site. He also reported no receipt of notices from governmental entities regarding possible violation of environmental laws or liability related to the same.

AHERA asbestos surveys reportedly are completed at the Site every three years. During abatement projects for asbestos-containing materials (ACM) and LBP, ACM debris is stored in a shipping container at the school, and LBP debris is placed in a 55-gallon drum. These containers are removed from the school for disposal following completion of the projects.

3.2.2 Oversight Agency Records

The EDR Radius Report was reviewed to help establish if hazardous materials incidents, radon gas, or oil and gas wells have been reported on the Site or in the immediate Site vicinity. The Site was listed on four of the regulatory agency databases including RCRA-Small Quantity Generator (SQG), Haznet, FINDS, and ECHO. The FINDS and ECHO databases are indicator databases for inclusion of the Site on the Haznet and SQG databases and contain no significant information.

The RCRA-SQG listing John Gill School (under RCSD), submitted registration as a small quantity generator of hazardous waste (between 100 and 1,000 kg/month generated) in 1996. The database listing also indicated the school submitted registration as a large quantity generator of hazardous waste (greater than 1,000 kg/month generated) in 1985. No generator violations were documented. Based on information obtained from the RCSD, the school applied for the generator designations for disposal of building materials during previous renovations.

The Haznet database is a record of facilities that submit manifests for disposal of hazardous waste. The John Gill School documented disposal of: 10.11 tons of asbestos-containing waste in 1997; 2.53 tons of asbestos-containing waste in 1998; 0.08 ton of other organic solids in 2004; and 0.21 ton of asbestos-containing waste in 2006.

On June 9, 2017, MCI requested available hazardous materials files and documents related to the presence or absence of environmental conditions and activities on the Site available from the San Mateo County Environmental Health Department (SMCEHD) (MCI, 2017). According to the SMCEHD representative, there are no files for the school.

The on-line State SWRCB GeoTracker database and the California DTSC EnviroStor database were reviewed for listings associated with the school. The school was not included in databases for either agency.

3.2.3 Federal and State Radon Screening

Federal and State radon screening test data for the Site zip code of 94062 were included in the EDR Radius Report (Appendix A). Based on information provided in the report, two Federal and

119 State radon screening tests have been performed within the Site zip code. The Federal radon screening tests of the 1st floor living area reported average radon activity at 2 picocuries per liter (pCi/l), with both radon test results beneath the USEPA recommended action level of 4 pCi/l. No Federal radon screening tests of the basement level were reported. Twenty seven of the 119 State tests (23%) reported radon exceeding the 4 pCi/l action level. Radon testing in San Mateo County by the State showed that 80% of the tests were less than 2 pCi/l, 12% were between 2 and 3.0 pCi/l, and 8% were greater than 4 pCi/l. In addition, according to the Radon Potential Zone Map for San Mateo County (Churchill, 2014), the Site is not in a high potential for indoor air concerns for radon. San Mateo County is reported in Federal EPA Radon Zone 2, with average indoor radon levels between 2 and 4 pCi/l.

4.0 POTENTIAL CHEMICALS OF ENVIRONMENTAL CONCERN

Based on results of the review of historical documents, potential historical practices, interviews conducted during the previous Phase I ESA, and the Site visit conducted by the DTSC and MCI, potential chemicals of environmental concern for the Site include:

- Lead-Based Paint:

  Lead-based paint may have been used on the two permanent classroom buildings, the small historical structure (garage) constructed in 1947, and the portable classroom/art building constructed in 1968. Therefore, flaking of lead-based paint is a potential environmental concern.

- PCBs (possibly present in window caulking/glazing utilized between 1950 and 1979):

  PCBs were sometimes used in window caulking and glaze from 1950 to 1979. The portable classroom and art structure were constructed in 1968 and therefore PCBs are a potential chemical of environmental concern. The other Site buildings were constructed before or after these dates and PCBs from this source are not a concern.

- OCPs and Arsenic:

  OCPs may have been used as termiticides around the perimeters of the two permanent classroom buildings and the portable classroom and art structure constructed in 1968. Arsenic-containing herbicides may also have been used to control weeds. Therefore, OCPs and arsenic are potential chemicals of health concern.

- Naturally Occurring Asbestos:

The Site is approximately 2 miles from ultramafic rocks that potentially contain NOA. Therefore, NOA is a potential substance of concern.

- PCBs:

  PCBs may be present in transformer oils. PG&E has been contacted but information on the transformer was not received by the time this workplan was prepared.

- Naturally Occurring Radon Gas:

  The Site is in Federal EPA Radon Zone 2, with average indoor radon levels between 2 and 4 pCi/l. Based on this and other State test data, there is a low probability of radon exceeding the action level.

- Imported Fill:

  The geotechnical report identified fill in an apparently continuous layer across the Site area. The fill underlies the original buildings which were constructed in 1947. The source of this fill is unknown. The man-made chemicals that could be present in these soils could be lead and arsenic from agriculturally applied pesticides, or possibly other metals from industrial uses. Semi-VOCs principally long-chained polycyclic aromatic hydrocarbons (PAH) are the other potential contaminants given the age of the fill. Naturally-occurring asbestos could also be present in the fill soils.

  Younger fills circa 1999-2000 was reportedly imported to support the newer buildings in the area of the future lunch shade structure. These fills could have multiple potential man-made contaminants and also NOA.

5.0 CONCEPTUAL SITE MODEL AND POTENTIAL AREAS OF ENVIRONMENTAL CONCERN

This section describes a conceptual site model (CSM) for the Site and describes potential areas and distribution of environmental concerns. The potential routes of human exposure associated with these potential contaminants are also evaluated and include inhalation, ingestion, and dermal contact, as shown in Figure 3.

5.1 Conceptual Site Model

As discussed previously potential primary sources of natural and man-made contaminants of concern include:

- Lead-based paint used on buildings constructed prior to 1993;
- Window caulking/glazing potentially containing PCBs utilized between 1950 and 1979;
- OCPs and arsenic at the perimeter of older buildings;
- PCBs in electrical transformer;
- Ultramafic rock deposits containing NOA; and,
- Undocumented imported fill soils.

Potential secondary sources include fugitive dust, stormwater runoff, and infiltration/percolation. Potential exposure pathways associated with the potential Site contaminants include air, surface sediment, groundwater, and indoor air. Potential exposure routes include inhalation, ingestion, and dermal contact.

Based on this evaluation, potentially complete exposure routes to potential contaminants include inhalation of fugitive dust, ingestion and dermal contact with surface soils, and inhalation of indoor air (radon). The exposure route for groundwater source is deemed incomplete due to the following: (1) no wells have been identified on the Site; (2) the Site is provided municipal potable water; and (3) the chemicals of potential concern have relatively low mobilities and are not expected to migrate to groundwater.

Based on the CSM, a screening evaluation of potential Site AOCs is presented below.

5.2 Potential Areas of Concern

5.2.1 Existing Permanent Building Perimeters

Lead-Based Paint

Two existing permanent classroom structures (Buildings B and C, Figure 4) date back to 1947 and one portable classroom/art building date back to 1968. Based on historical practices, lead-based paint may have been used on the structures. Aerial photographs from 1948 and 1956 suggest that areas around the building perimeters were not paved (the ground surface appeared to have been fully paved by 1963).[1] Direct deposition of lead-based paint via flaking to exposed surface soils around the building perimeters may have occurred between 1947 and 1963.

The northern boundary of the Site is adjacent to the south side of Building A, an original classroom. The area between the Site and Building A appeared to be paved as early as 1948, but historical injection of termiticides may have occurred along the building perimeter.

[1] The resolutions of aerial photographs from pre-1974 are low, and positive identification of asphalt- or concrete-covered surfaces is limited.

Based on this evaluation, existing building perimeters (excepting the Elevator Building) are considered potential areas of concern for lead-based paint. [2]

PCBs

Window caulking and glazing have been known to contain PCBs for buildings constructed or renovated between 1950 and 1978. Construction of the two existing permanent classroom structures (1947) predates use of PCBs in window caulking/glazing, however, it is possible that some of the glass and/or window frames were repaired or replaced during the period of PCB use in caulking/glazing. The portable classroom/art building was constructed in 1968, and window caulking/glazing with PCBs may have been utilized. However, historical aerial photographs suggest the ground surface around the perimeter of the portable classroom/art building was paved by 1968 except on the south side of the building where there is exposed soil. This location, therefore, is the only place with the potential for direct deposition of PCBs to surface soils.

OCPs and Arsenic

Based on historical practices prior to 1989 and possible unpaved condition of the Site prior to 1963, the soil around the existing permanent building perimeters may have been treated with OCPs (e.g., termiticides and/or herbicides possibly containing arsenic), likely through direct-surface application, or OCP injection into subsurface soils.[3]

Based on this evaluation, the perimeter of the existing permanent buildings (paved and unpaved), are considered potential areas of concern for OCPs and arsenic.

Metals and PAHs

There are fill soils under the permanent buildings placed just prior to original construction in 1947. The geotechnical report identified fill in an apparently continuous layer across the Site area. The fill underlies the original buildings which were constructed in 1947. The source of this fill is unknown. The man-made chemicals that could be present in these soils could be lead and arsenic from agriculturally applied pesticides, or possibly other metals from industrial uses. Semi-VOCs principally long-chained polycyclic aromatic hydrocarbons (PAH) are the other potential contaminants given the age of the fill. Naturally-occurring asbestos could also be present in the fill soils.

[2] The Elevator Building was constructed in 2000, which post-dates concerns for lead-based paint.

[3] The Elevator Building was constructed in 2000, which post-dates concerns for OCPs and arsenic.

Younger fills circa 1999-2000 was reportedly imported to support the newer buildings in the area of the future lunch shade structure. These fills could have multiple potential man-made contaminants and also NOA.

The area on the south side of the portable classroom/art building has been unpaved since constructed in 1968. Therefore lead-based paint flakes, PCBs (from window caulking/glazing at the portable structure), and OCPs/arsenic may be present in adjacent soils. The rest of the soils around this building appears to have been paved since construction.

5.2.3 Historic Structures

Lead-Based Paint

A small structure (i.e., reportedly a garage) was identified in early aerial photographs was located along Avenue Del Ora and appeared to have been constructed between 1943 and 1948. Based on historical practices, lead-based paint may have been used on the structure. Aerial photographs from 1948 and 1956 suggest that the area around the building was not paved. Direct deposition of lead-based paint via flaking to exposed surface soils around the building may have occurred until the structure was removed between 1968 and 1974.

A second small structure was visible in aerial photographs from 1991 and 1998. Based on the age of the structure, the only concern is for flaking of lead-based paint to soils.

PCBs

The historical structure was constructed in the late 1940s and was removed from the Site between 1968 and 1974. Window caulking and glazing have been known to contain PCBs for buildings constructed or renovated between 1950 and 1979, post-dating the construction of the historical structure. No records of renovations of the garage between 1950 and 1979 were identified but there may have been windows that were present and replaced. Therefore, there is a low likelihood that the window caulking/glazing at the historical structure contained PCBs.

Based on this evaluation, shallow soils are a potential area of concern for PCBs associated with flaking of window caulking/glazing.

OCPs and Arsenic

Based on historical practices prior to 1989, the historical structure may have been treated with OCPs (e.g., termiticides and/or herbicides possibly containing arsenic), either through direct-surface application, or injection into subsurface. Therefore, this area is considered a potential area of concern for OCPs and arsenic.

5.2.4 Site Soils – Naturally-Occurring Asbestos

Naturally-occurring asbestos (NOA) is often present in ultramafic rocks and can be eroded and transported in sediment long distances. The nearest outcrop of ultramafic rock that could contain NOA is approximately 2 miles west of the Site, however, serpentinite was reported in some of the geotechnical borings (Ninyo and Moore, 2017).

Based on this evaluation, site soils are considered a potential area of concern for NOA.

5.2.5 Electrical Transformer

There is one pad-mounted electrical transformer within the Site area. The transformer is located on a concrete pad that would provide some protection from impacting soil in the event of a prior release of transformer oil. PG&E has been contacted and this transformed was reportedly manufactured in 1998 and is clearly marked inside the cabinet with a sticker that reads (Filled with NON-PCB Mineral Oil at Time of Manufacture." There was not a previous transformer at this location, and the location of the previous electrical transformer is unknown. Therefore, there is no concern about the presence of PCBs in soils around the current transformer.

5.2.6 Radon Gas

As stated previously, San Mateo County is reported in Federal EPA Radon Zone 2, with average indoor radon levels between 2 and 4 pCi/l. Radon testing in San Mateo County by the State showed that 80% of the tests were less than 2 pCi/l, 12% were between 2 and 3.0 pCi/l, and 8% were greater than 4 pCi/l. In additions, according to the Radon Potential Zone Map for San Mateo County (Churchill, 2014), the Site is not in a high potential for indoor air concerns for radon. Based on these test data, there is a low probability of radon gas exceeding the 4 pCi/l concentration of concern and sampling for radon is not proposed.

5.2.7 Fill Materials

There has been a geotechnical investigation for the Site which included soil borings and logging (Ninyo and Moore, 2017) across the Site which indicates that there is approximately 1.5 feet of fill soils underlying asphalt and baserock across the entire Site area. Likely the fill is exposed near the surface in exposed soil areas. The fill likely dates back to the original construction of the school in 1947. Given the age of this fill, the only man-made chemicals that could be present in these soils would be lead and arsenic from agriculturally applied pesticides, or possibly other metals from industrial uses. Semi-VOCs principally long-chained polycyclic aromatic hydrocarbons (PAH) are the other potential contaminants given the age of the fill. Naturally-occurring asbestos could also be present in the fill soils.

A second addition of fill soils to the Site was in about 1999-2000 when construction of the elevator and other structures in that area occurred. There is no documentation of the source of any of the fill or if testing was done to determine if contaminants were present in the fill. It is expected that this fill will be encountered only in boring FB-1 located in the future shade structure area, Figure 4. Therefore, sampling and laboratory testing will be needed to address this potential concern. This testing would include: OCPs and PCBs, CAM 17 metals, semi-VOCs including PAHs, VOCs, NOA, and purgeable and extractable petroleum hydrocarbons.

6.0 SCOPE OF WORK - SAMPLING AND ANALYSIS

This section of the PEA Work Plan presents the sampling objectives, and the proposed sampling locations, rationale, and analyses.

6.1 Sampling Objective

The objective of the field investigation is to determine if contaminants are present at the Site that could represent potential health risks for the planned future school uses. The data obtained will be used to evaluate this risk should contaminants be identified, and to evaluate if response actions could render the Site compliant with current school-use standards.

6.2 Sampling Locations, Rationale, and Analyses

The potential areas of environmental concern identified previously require sampling to investigate the possible presence of contamination at the Site. Proposed sample locations and rationales for sampling at each area of concern, sample frequencies, approximate sample depths, proposed analyses, and laboratory reporting limits are summarized in Table 1. Sample locations are shown on Figure 4. The laboratory reporting limits included in Table 1 are sufficiently low for use in an evaluation of health risk.

6.2.1 Existing Building Perimeters

To evaluate potential environmental concerns associated with flaking of lead-based paint and PCBs in window caulking/glaze, the direct application of OCPs and arsenic, and the injection of OCPs, soil samples will be collected at boring locations placed within approximately 1 foot from the outside walls of the existing permanent classrooms and portable buildings (Figure 4).

Due to the length of the two permanent classroom structures (Buildings B and C) (over 100 feet), two soil borings for sampling will be completed adjacent to the northern and southern walls, and one soil boring will be completed adjacent to the eastern and western walls of each building for

a total of 12 locations (Figure 4) [4]. Four borings will be completed along the perimeter of the portable classroom/art structure. One boring will be completed adjacent to Building A which has a planter strip and borders the northern edge of the Site where soil disturbance is possible during construction activities.

Samples will be collected:

- At a depth of 0 to 0.5 foot bgs in areas where soil is exposed (BP-1, BP-2, BP-3, BP-7, BP-10 and BP-17);
- From approximately 0.5 to 1.0 feet bgs in areas that require coring of concrete or asphalt (BP-4, BP-5, BP-6, BP-8, BP-9, BP-11, BP-12, BP-13, BP-14, and BP-15; and,
- From approximately 1.5 to 2.0 (fill) and 2.0 to 2.5 feet bgs at all 17 locations around buildings.

The near-surface samples will be analyzed for lead (EPA Test Method 6010B), OCPs (EPA Test Method 8081), PCBs (EPA Test Method 8082), and arsenic (EPA Test Method 6010B). The deeper samples will be analyzed for OCPs, PCBs, CAM17 and Semi-VOCs due to the presence of fill soils, as shown in Table 1.

6.2.2 Historic Structures

To evaluate potential environmental concerns associated with the two historical structures identified in aerial photographs, soil samples will be collected at two borings (HS-1 and HS-2) in the general vicinity of the former structures (Figure 4). Samples will be collected:

- At a depth of 0 to 0.5 foot bgs; and,
- From a depth of approximately 2 to 2.5 feet bgs.

The near-surface sample will be analyzed for lead (EPA Test Method 6010B), OCPs (EPA Test Method 8081), PCBs (EPA Test Method 8082), and arsenic (EPA Test Method 6010B) (Table 1). The deeper sample will only be analyzed for OCPs.

6.2.4 Naturally-Occurring Asbestos

Naturally-occurring asbestos (NOA) is often present in ultramafic rocks and can be eroded and transported in sediment long distances. The nearest outcrop of ultramafic rock that could contain NOA is approximately 2 miles west of the Site. This is within the 10-mile distance established by the DTSC Schools Program guidelines which triggers sampling for NOA fibers. In

[4] The borings will be adjusted to be located beneath windows to address potential PCBs associated with caulking/glazing.

addition, serpentinite was logged in some of the borings drilled during the geotechnical investigation (Ninyo and Moore, 2017).

To evaluate the potential presence of NOA, sampling for NOA will be co-located with six distributed building perimeter locations (BP-2, BP-5, BP-7, BP-10, BP-13, and FB-1). Samples will be collected from an expected three different materials consisting of fill, soil and bedrock in each boring (18 total samples). The boring at FB-1 is located where the future shade structure will be located and the footings will be 5 feet in depth, therefore, the soil boring will be drilled to this depth as well. All other footings and utilities across the Site are expected to be no more than 2.5 feet deep.

The soil samples for asbestos should be analyzed using CARB 435 by polarized light microscopy (PLM) with a sensitivity of 0.25% by point count with 25% of the samples also analyzed by transmission electron microscopy (TEM) with a sensitivity of 0.005% by weight, If any of the samples analyzed by PLM or TEM contain detectable concentrations of asbestos, then all of the samples would be analyzed by TEM. In accordance with DTWC Tiered Response Action for Naturally Occurring Asbestos, for each lithologic unit if >25% or more of the samples have PLM results greater than 1% or if 25% or more of the TEM samples have 0.01% or greater asbestos then the site will require mitigation for asbestos.

6.2.5 Fill Materials

Approximately 1.5 feet of fill exists across the Site that is undocumented. To evaluate this material for the presence of contaminants, one sample will be collected from six borings distributed across the Site (BP-2, BP-5, BP-7, BP-10, BP-13, and FB-1) and analyzed for persistent contaminants only which includes OCPs and PCBs (EPA Test Method 8081/8082), CAM 17 metals (EPA Test Method 6010/7470), semi-VOCs including PAHs (8270SIM) and NOA by TEM methods. Volatile and/or compounds that are not persistent are not considered a potential concern because the fill has been in place for many years likely decades. The borings will be logged and the samples are expected to be collected from a depth of approximately 1.0 to 2.0 feet below the existing grade depending on the presence or absence of pavement and baserock. Borings where no asphalt or baserock is present will have the shallower sample depths.

A second addition of fill soils to the Site was in about 1999-2000 when construction of the elevator and other structures in that area occurred. There is no documentation of the source of any of the fill or if testing was done to determine if contaminants were present in the fill. Therefore, sampling and laboratory testing will be needed to address this potential concern. This testing would include: OCPs and PCBs, CAM 17 metals, semi-VOCs including PAHs, VOCs, NOA by TEM, purgeable and extractable petroleum hydrocarbons, and VOCs (Table 1).

6.3 Sample Collection Methods

This section describes the soil sampling methods to be used to evaluate the potential environmental concerns previously described. Included are descriptions of the sampling equipment and methods of sampling, including equipment decontamination. Quality assurance/quality control (QA/QC) practices are described in Section 7.0.

6.3.1 Administrative Activities

Before sampling commences, a field work notice will be delivered to residences and businesses within the line of sight at least 3 to 5 days prior to the onset of the PEA sampling. An example of the field work notice is included in Appendix C. The field work notice will also be posted around the perimeter of the Site throughout the sampling activities.

Daily field notes documenting the sampling activities and any issues encountered during the sampling will be prepared. Laboratory chain-of-custody forms serve as records of samples collected by date and time and will be prepared each day. Photos of any unusual subsurface conditions will be taken.

6.3.2 Sample Locating

Each of the sample locations will be measured in the field using a tape measure and identified on a scaled map or aerial photo base map of the Site. Samples/borings in open areas will be located and digitally stored using a handheld GPS unit.

6.3.3 Near-Surface Soil Sampling

New, disposable gloves will be worn by field personnel during all sampling activities and will be changed between sample locations. Used gloves will be disposed accordingly.

Near-surface soil samples will be collected by hand (scooping) from the upper 6 inches of soil using new, laboratory--supplied 4-ounce or 9-ounce glass jars. If the soils are too hard to safely scoop with a glass jar, they will be broken using a decontaminated pick or shovel. Decontamination procedures include washing equipment in a liquinox and water bath to remove all soil particles, followed by double-rinsing with distilled water. The small quantity of decontamination water will be discharged onto the ground surface adjacent to each of the sample locations. After sample collection, Teflon™-lined lids will be securely fastened and the jar labeled with a unique sample identification number.

The samples will then be placed in an insulated cooler chilled to 4 degrees +/- 2 degrees Celsius and hand-delivered by MCI personnel under chain-of-custody to Torrent Laboratory, a

California-State certified analytical laboratory. A copy of their State-certification is included in Appendix E.

6.3.4 Deeper Soil Sampling

New, disposable gloves will be worn by field personnel during all sampling activities and will be changed between sample locations. Used gloves will be disposed accordingly.

Soil samples collected from depths deeper than 6 inches will be collected using direct-push drilling equipment. Samples will be collected using stainless steel push rods fitted with plastic liners. Once the desired depth is reached, the rod/liner will be extracted and the targeted sample interval will be cut from the liner, capped with Teflon™ film, fitted with a tight-fitting cap, and labeled with a unique sample identifier.

If a hand auger is utilized, it will be equipped with a 3 inch-diameter stainless steel auger head, and the boring will be advanced to a depth of approximately 2.0 feet bgs. A slide hammer will be used to advance a 2.5-inch diameter, 6-inch long core sampler with a stainless-steel liner. Once the sample is collected, the liner will be capped with Teflon™ film, fitted with a tight-fitting cap, and labeled with a unique sample identifier. The stainless-steel liners will then be placed in plastic bags for temporary storage in an insulated cooler. Non-dedicated sampling equipment (e.g., drill shoe and slide hammer) will be decontaminated prior to and in between sample locations using the procedures described previously to mitigate the potential for cross-contamination between samples.

The samples will then be placed in an insulated cooler chilled to 4 degrees +/- 2 degrees Celsius and hand delivered by MCI personnel under chain-of-custody to a California-certified analytical laboratory.

6.4 Chain-of-Custody

Chain-of-Custody (COC) forms will be used to document sample collection and transportation to the laboratory for analysis. All samples will be accompanied by a COC documenting the unique sample identification number, date and time collected, number of samples for analysis, type of container and the requested laboratory analyses.

6.5 Field Variances

The DTSC will be notified in the event of variances to the Workplan due to field conditions or other modifications to the sampling strategies. Any variances in the Workplan will be documented in the PEA Report.

7.0 QUALITY ASSURANCE/QUALITY CONTROL

The following QA/QC procedures will be employed in both the field and the laboratory. QA/QC samples include the collection of field duplicate samples.

7.1 Field Procedures

Field QA/QC procedures will be performed at the Site and consist of the following measures:

- Chain-of-Custody (COC) forms will be used for sample submittal to the laboratory;
- Field duplicates – Approximately 10% of the soil samples will be split in the field by MCI personnel and submitted as "blind" duplicates to the laboratory for analysis as individual discrete soil samples.
- Rinsate blanks – Rinsate blanks on field sampling equipment will be prepared for approximately 10% of the total number of soil samples collected.

7.2 Duplicate Samples

Duplicate soil samples will be analyzed to evaluate the analytical procedures and methods employed by the laboratory. Approximately one duplicate soil sample will be collected per 10 soil samples collected. Duplicate soil samples will be collected from surface samples only and and immediately adjacent to the collected sample. The samples will be placed in 4-ounce and labeled with unique sample identification numbers. The blind duplicate samples will be submitted to the laboratory for analyses and analyzed for each chemicals of potential concern. The analytical results from the original and duplicate samples will be evaluated and the higher of the two results will be used for statistical analysis and used in the risk assessment.

8.0 HEALTH AND SAFETY

A site-specific health and safety plan has been prepared and is included in Appendix D. The health and safety equipment will include Level D personal protective equipment (PPE): disposable, single-use nitrile gloves at each sampling location to minimize the potential for contaminant transfer and personnel exposure, hard hat, protective eye wear, OSHA-rated safety vest, and safety boots.

The field sampling will likely be conducted in the spring, therefore, heat exposure is not likely a significant concern. In the unexpected event of high temperatures, field personnel will be conscious of the signs and symptoms of heat stress. Personnel performing the sampling will carry water and take occasional breaks to rest in the shade and to rehydrate.

An emergency first aid kit will be on Site at all times. Should an incident occur that requires medical attention, the field personnel will have cell phones and will call 911 for medical assistance.

Personnel performing the sampling will be 40-hour OSHA HAZWOPER trained, with current annual refresher training and annual medical monitoring.

A list of emergency contacts is shown in the table below. A map with a narrative describing the route to the nearest emergency room is shown on Figure D-1, attached to the HASP (Appendix D).

Mr. John Baker Superintendent 750 Bradford Street Redwood City, California 94063 (650) 482-2230 (office) (650) 482-2200 (main office) Email: jbaker@rcsdk8.net		Mr. Tom McCloskey, Project Manager McCloskey Consultants, Inc. 420 Sycamore Valley Road West Danville, California 94526 (925) 786-2667(cellular) Email: Tom@mccloskeyconsultants.com

9.0 DETERMINING DATA USABILITY FOR RISK ASSESSMENT

The laboratory analytical data collected from this Site will be reviewed for data quality and usability in a risk assessment (DURA), should one be needed. The DURA process involves assessing overall data quality and the usability of data for performing a quantitative risk and selection of chemicals of potential concern (COPCs) for the Human Health Screening Evaluation (HHSE) described in the next section. Data determined to be unusable will not be used in the HHSE. Data identified as usable through this process will be evaluated for chemical distribution..

As required by USEPA guidance, the analytical methods to be used are capable of detecting concentrations at or below many regulatory threshold concentrations, as shown in Table 1. The analytical methods for COPCs to be used at the Site were identified in SW846, which are acceptable methodologies for all COPCs that could carry through in the HHSE. The analytical data will be reviewed to determine if sufficiently low detection limits were achieved. The data will also be reviewed for flagging codes placed on the data by the laboratory, in accordance with their internal QA/QC procedures. If flagging codes are present, they will be reviewed to determine if the data are usable in the HHSE, should one be performed. Any flagging codes in the laboratory analytical reports will be discussed in the PEA Report.

10.0 HUMAN HEALTH SCREENING EVALUATION

A HHSE will be performed based on the analytical results from the PEA sampling, provided the data are determined to be usable, as described above. The COPCs will be evaluated using the DTSC's Human Health Risk Assessment (HHRA), Note 3 prior to the application of the USEPA Regional Screening Levels (RSLs) (USEPA, 2017). We understand from the DTSC that all OCPs need to be accounted for and screened via a risk assessment on a chemical specific basis. If multiple OCPs (or other COPCs) are detected in any sample, but the concentrations are less than their concentration detailed in the HHRA Note 3 or respective USEPA RSLs, a Cumulative Health Risk and Hazard Index will be calculated. The Cumulative Risk Analysis would be done separately for cancer and non-cancer risks.

The Office of Environmental Health Hazard Assessment (OEHHA) modified the California Human Health Screening Level (CHHSL) for lead to 80 milligrams per kilogram (mg/kg). Based on the CHHSL modification, DTSC will be making lead cleanup decisions based on the 95% Upper Confidence Limit (UCL) of lead levels left in place but after any Site mitigation is done.

DTSC recommends the proposed cleanup goal for total lead in soil of 80 mg/kg based on the 95% UCL. According to DTSC correspondence, DTSC recommends *"comparing point-by-point discrete sample concentrations to the selected (or derived site-specific) background threshold value."*

11.0 REPORTING

The results of this soil quality investigation will be included in a PEA report in the general format as described in the Cal/EPA *PEA Guidance Manual* required by the DTSC for Site approval (DTSC, 2013). This report will be submitted to the DTSC, simultaneously with the required 30-day public review comment period. The District's current intention is to make the PEA available for public review by Education Code, section 17213.1, subdivision (a)(6)(8), (or "option B"), where the PEA review is combined with a California Environmental Quality Act (CEQA) review. Review comments will be reviewed and responded to prior to submittal of the final PEA Report after the review period has ended.

12.0 PROPOSED WORK SCHEDULE

Provided below is a schedule of milestones to perform the scope of work:

MCI Submittal of PEA Work Plan	February 2, 2018
DTSC Review and Approval of PEA Work Plan	March 1
MCI Revision of PEA Work Plan	March 30
DTSC Approval of Revised PEA Work Plan	April 6
Field Work Notification	April 9
Conduct Soil Sampling	April 11-12 (spring break)
Laboratory Analysis and Draft PEA Report Preparation	June 1
Public Comment Period (30-days) and Hearing	June 1 - July 2
Receive DTSC and Public Comments on PEA Report	July 2
Comment Resolution Complete	July 13
Submit Final PEA Report to DTSC	July 13
DTSC Approval of Final PEA Report	August 3, 2018

13.0 REFERENCES

Cal/EPA, Revised September 24, 2004. *Interim Guidance Naturally-Occurring Asbestos (NOA) at School Sites.*

Cal/EPA, January 2005. *Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties.*

Cal/EPA, September 12, 2006. *Interim Guidance, Evaluation of School Sites with Potential Soil Contamination as a Results of Lead from Lead-Based Paint, Organochlorine Pesticides from Termiticides, and Polychlorinated Biphenyls from Electrical Transformers.*

Cal/EPA, March 21, 2007. *Arsenic Strategies, Determination of Arsenic Remediation, Development of Arsenic Cleanup Goals for Proposed and Existing School Sites.*

Cal/EPA, April 30, 2008. *Interim Guidance for Sampling Agricultural Properties (Third Revision).*

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TABLE

TABLE 1
PROPOSED SAMPLING AND ANALYSIS SUMMARY
Preliminary Environmental Assessment Work Plan
John Gill School
555 Avenue Del Ora
Redwood City, California

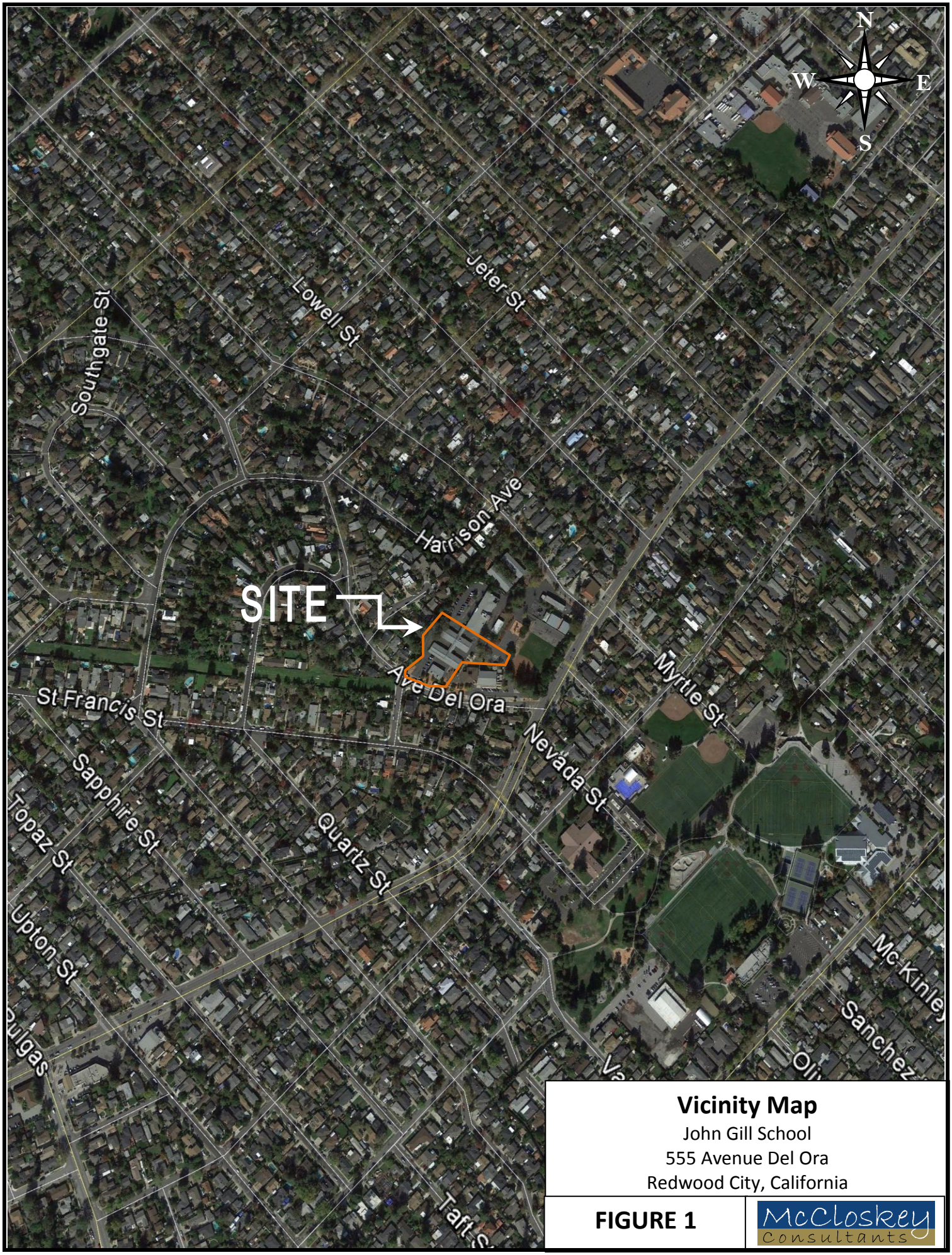
Potential Area of Concern (AOC)	Site Location/Boring Identification	Potential Chemicals of Concern	Sampling Rationale	Sample Type	Sample Location	Sample Frequency[1]	Approximate Sample Depth (feet bgs)	Analyses	Reporting Limits[2]
Existing Building Perimeters	Two permanent classrooms constructed in 1947/ BP-1 through BP-12 One portable classrom and art structure constructed in 1968/ BP-13 through BP-16 Area between northern Site boundary and off-Site Building A (constructed in 1931) BP-17 Two permanent classrooms constructed in 1947/BP-2, BP-5, BP-7, BP-10, BP-13, FB-1	LBP and PCBs	Evaluate potential for historical flaking of paint to near-surface soils	Soil	Within 1-2 feet laterally from outside walls of structures	Permanent classrooms: Two near-surface soil samples per northern and southern wall; one per eastern and western wall Portable classroom and art structure: One near-surface soil sample per wall	0 to 0.5	Lead (EPA Test Method 6010B) PCBs (EPA Test Method 8082)	Lead PQL = 3.0 mg/Kg PCB PQLs = 0.1 to 0.2 mg/Kg
		OCPs and Arsenic	Evaluate potential for historical and recent direct application of pesticides to near-surface soils					OCPs (EPA Test Method 8081); Arsenic (EPA Test Method 6010B)	OCP PQLs = 2.0 µg/Kg As PQL = 1.3 mg/kg
			Evaluate potential for historical injection of pesticides to building perimeter deeper soils			One deeper soil sample per location	2 to 2.5	OCPs (EPA Test Method 8081)	OCP PQLs = 2.0 µg/Kg
Historic Structures	Former locations of two small structures/ HS-1 and HS-2	LBP	Evaluate potential for historical flaking of paint to near-surface soils	Soil	Near northern wall of former structure	One near-surface soil sample per location[4]	0 to 0.5	Lead (EPA Test Method 6010B)	Lead PQL = 3.0 mg/Kg
		OCPs and Arsenic	Evaluate potential for historical and recent application of pesticides to near-surface soils					OCPs (EPA Test Method 8081); Arsenic (EPA Test Method 6010B)	OCP PQLs = 2.0 µg/Kg As PQL = 1.3 mg/kg
			Evaluate potential for historical injection of pesticides to deeper soils			One deeper soil sample per location[4]	2 to 2.5	OCPs using EPA Test Method 8081	OCP PQLs = 2.0 µg/Kg
NOA in fill, soil and bedrock	Site-Wide (co-located) BP-2, BP-5, BP-7, BP-10, BP-13, FB-1	NOA	Evaluate potential for naturally occurring asbestos in near-surface and subsurface soils	Soil	Areas of exposed soil	Three near-surface and three deeper soil samples per location	From fill, soil, and bedrock, as determined in the field	CARB 435 by PLM/TEM	0.0001%

TABLE 1
PROPOSED SAMPLING AND ANALYSIS SUMMARY
Preliminary Environmental Assessment Work Plan
John Gill School
555 Avenue Del Ora
Redwood City, California

Potential Area of Concern (AOC)	Site Location/Boring Identification	Potential Chemicals of Concern	Sampling Rationale	Sample Type	Sample Location	Sample Frequency[1]	Approximate Sample Depth (feet bgs)	Analyses	Reporting Limits[2]
Fill Materials: (circa 1947, Site-wide and circa 2000, near elevator building)	BP-2, BP-5, BP-7, BP-10, BP-13, FB-1	OCPs/PCBs, Arsenic, CAM 17 Metals, and Semi-VOCs (including PAHs)	Evaluate potential for fill to contain persistent contaminants	Soil	Within 1-2 feet laterally from outside walls of structures	One sample each boring from fill materials	0 to 0.5 and 2 to 2.5	OCPs/PCBs (EPA Test Method 8081/8082); Arsenic (EPA Test Method 6010B); CAM 17 Metals (EPA Test Method 6010/7470); Semi-VOCs (EPA Test Method 8270SIM); At FB-1 only: VOCs (EPA Test Method 8260B); TPHd/TPHg (EPA Test Methods 8015/8020)	OCP PQLs = 2.0 µg/Kg As PQL = 1.3 mg/kg PCB PQLs = (0.1 to 0.2 mg/Kg) CAM 17 Metals PQLs (varies) Semi-VOCs PQLs (varies)

Notes:
bgs = Below ground surface.
LBP = Lead-based paint.
PCBs = Polychlorinated biphenyls.
OCPs = Organochlorine pesticides.
VOCs = Volatile organic compounds.
Semi-VOCs = Semivolatile organic compounds (including polycyclic aromatic compounds).
TPHd/TPHg = Total petroleum hydrocarbons as diesel and gasoline.
NOA = Naturally occurring asbestos.
PQL = Practical Quantitation Limit.
As = Arsenic.
CARB = California Air Resources Board.
PLM = Polarized Light Microscopy.
TEM = Transmission Electron Microscopy.
mg/Kg = Milligrams per kilogram.
µg/Kg = Micrograms per kilogram.
[1] Duplicate soil samples will be collected at a rate of 10 percent of the total number of samples collected.
[2] Concentration assumes no dilution.
[3] Excepting Chlordane and Toxaphene, where PQL = 20 mg/Kg and 50 mg/Kg, respectively.
[4] Limited sampling is proposed due to the small size of the historical structure.

FIGURES



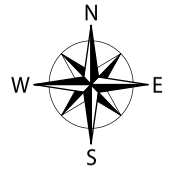
Vicinity Map

John Gill School
555 Avenue Del Ora
Redwood City, California

FIGURE 1

McCloskey Consultants





Notes:
c. = Approximate construction date based on historical aerial photographs and interviews.

0 200

Scale in Feet (Approximate)

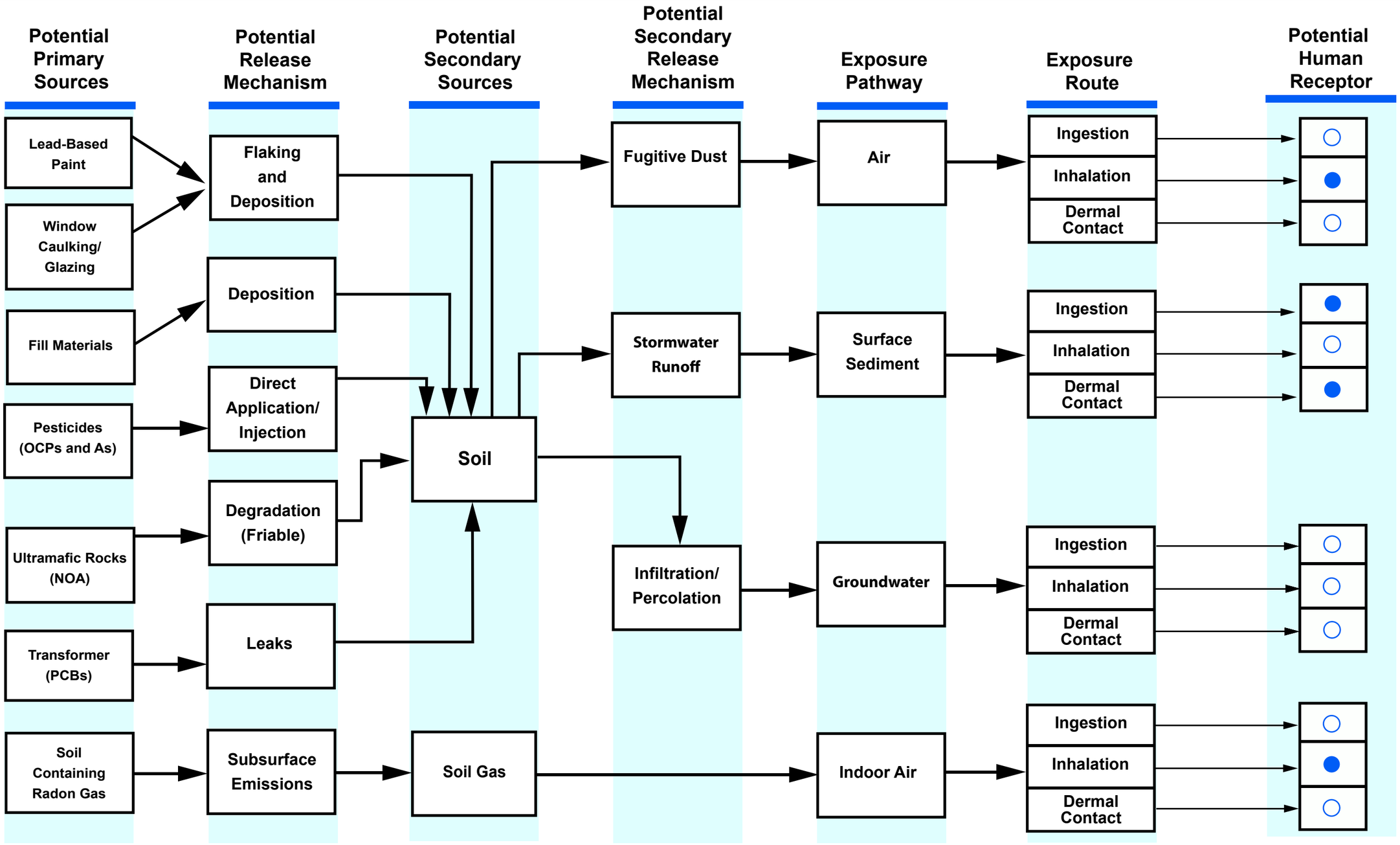
Source: Google Earth Pro, 2018

McCloskey Consultants

Site Plan
John Gill School Expansion
555 Avenue Del Ora
Redwood City, California

FIGURE 2

Drawn by: TMH



Conceptual Site Model
John Gill School Expansion
555 Avenue Del Ora
Redwood City, California

McCloskey Consultants

FIGURE 3



Source: Google Earth Pro, 2018

N
W
E
S

LEGEND:

- Approximate Parcel Boundary
- Approximate Site Boundary
- BP-1 — Building Perimeter Sample Location - Exposed Landscaped Areas
- BP-2 — Building Perimeter Sample Location - Beneath Asphalt and/or Concrete
- HS-1 — Historical Structure Sample Location
- FB-1 — Fill and Bedrock Sampling Boring (5 ft TD)

0 100

Scale in Feet (Approximate)

McCloskey Consultants

PEA Sampling Plan

John Gill School Expansion
555 Avenue Del Ora
Redwood City, California

FIGURE 4

Drawn by: TMH

Appendix A

Regulatory Database Report

John Gill Elementary School
555 Avenue Del Ora
Redwood City, CA 94062

Inquiry Number: 4955887.16s
June 05, 2017

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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GEOCHECK ADDENDUM

Physical Setting Source Addendum	A-1
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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

555 AVENUE DEL ORA
REDWOOD CITY, CA 94062

COORDINATES

Latitude (North):	37.4743900 - 37° 28' 27.80''
Longitude (West):	122.2405580 - 122° 14' 26.00''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	567152.2
UTM Y (Meters):	4147566.5
Elevation:	59 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5640620 PALO ALTO, CA
Version Date:	2012
Southwest Map:	5640628 WOODSIDE, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140608
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
555 AVENUE DEL ORA
REDWOOD CITY, CA 94062

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	REDWOOD CITY SD-JOHN	555 AVENUE DEL ORA	HAZNET		TP
A2	REDWOOD CITY SCHOOL	555 AVENUE DE ORA	RCRA-SQG, FINDS, ECHO, HAZNET		TP
A3	REDWOOD CITY SD-JOHN	555 AVENUE DEL ORA	HAZNET		TP
B4	CITY OF REDWOOD CITY	2190 JEFFERSON	SWEEPS UST	Lower	112, 0.021, ENE
B5	FIRE STATION #10	2190 JEFFERSON	San Mateo Co. BI	Lower	112, 0.021, ENE
6	WEST BAY MOBILE AUTO	1135 HARRISON AVE	EDR Hist Auto	Lower	124, 0.023, North
7	GLOBAL GARAGE LLC	1105 MADISON AVE	EDR Hist Auto	Lower	648, 0.123, East
8	PATRICIAN FINISHES	322 KING ST	RCRA-SQG	Lower	1099, 0.208, NNW
9	JEFFERSON CHEVRON	3139 JEFFERSON AVE	LUST, HIST UST	Higher	2073, 0.393, SW
C10	REDWOOD CITY SCHOOL	601 JAMES AVE.	LUST, UST, SWEEPS UST, HIST UST	Lower	2091, 0.396, NNE
C11	REDWOOD CITY SCHOOL	601 JAMES	LUST, HIST CORTESE	Lower	2091, 0.396, NNE
12	ROBISON PROPERTY	827 EL CAMINO REAL	ENVIROSTOR, SLIC, VCP	Lower	4278, 0.810, NNE
13	TOWNE FORD SALES	1601 EL CAMINO REAL	LUST, HIST UST, Notify 65	Lower	4287, 0.812, ENE
14	FORMER DEMMA PARCELS	104 AND 112 CEDAR	ENVIROSTOR	Lower	4716, 0.893, ENE
15	ARTON MANAGEMENT/INV	570 EL CAMINO REAL	ENVIROSTOR, LUST, HIST UST	Lower	4877, 0.924, North
16	COOKS AUTO BODY	1104 MAIN STREET	RCRA-SQG, ENVIROSTOR, LUST, FINDS, ECHO	Lower	4961, 0.940, NE
17	OAK KNOLL STATION	590 CANYON ROAD	Notify 65	Higher	5260, 0.996, West

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
REDWOOD CITY SD-JOHN 555 AVENUE DEL ORA REDWOOD CITY, CA 94062	HAZNET GEPAID: CAC002604890	N/A
REDWOOD CITY SCHOOL 555 AVENUE DE ORA REDWOOD CITY, CA 94062	RCRA-SQG EPA ID:: CAD981162894 FINDS Registry ID:: 110002679290 ECHO HAZNET GEPAID: CAD981162894	CAD981162894
REDWOOD CITY SD-JOHN 555 AVENUE DEL ORA REDWOOD CITY, CA 94062	HAZNET GEPAID: CAC002579747	N/A

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

EXECUTIVE SUMMARY

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS ---------- Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG ---------- RCRA - Large Quantity Generators
RCRA-CESQG ---------- RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System
US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROL ---------- Sites with Institutional Controls

Federal ERNS list

ERNS ---------- Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE ---------- State Response Sites

State and tribal landfill and/or solid waste disposal site lists

SWF/LF ---------- Solid Waste Information System

State and tribal leaking storage tank lists

INDIAN LUST ---------- Leaking Underground Storage Tanks on Indian Land
SLIC ---------- Statewide SLIC Cases

State and tribal registered storage tank lists

FEMA UST ---------- Underground Storage Tank Listing
UST ---------- Active UST Facilities
AST ---------- Aboveground Petroleum Storage Tank Facilities
INDIAN UST ---------- Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

VCP ---------- Voluntary Cleanup Program Properties
INDIAN VCP ---------- Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS ---------- Considered Brownfieds Sites Listing

EXECUTIVE SUMMARY

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT ..... Waste Management Unit Database
SWRCY ..... Recycler Database
HAULERS ..... Registered Waste Tire Haulers Listing
INDIAN ODI ..... Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9 ..... Torres Martinez Reservation Illegal Dump Site Locations
ODI ..... Open Dump Inventory
IHS OPEN DUMPS ..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ..... Delisted National Clandestine Laboratory Register
HIST Cal-Sites ..... Historical Calsites Database
SCH ..... School Property Evaluation Program
CDL ..... Clandestine Drug Labs
Toxic Pits ..... Toxic Pits Cleanup Act Sites
US CDL ..... National Clandestine Laboratory Register

Local Lists of Registered Storage Tanks

HIST UST ..... Hazardous Substance Storage Container Database
CA FID UST ..... Facility Inventory Database

Local Land Records

LIENS ..... Environmental Liens Listing
LIENS 2 ..... CERCLA Lien Information
DEED ..... Deed Restriction Listing

Records of Emergency Release Reports

HMIRS ..... Hazardous Materials Information Reporting System
CHMIRS ..... California Hazardous Material Incident Report System
LDS ..... Land Disposal Sites Listing
MCS ..... Military Cleanup Sites Listing
SPILLS 90 ..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR ..... RCRA - Non Generators / No Longer Regulated
FUDS ..... Formerly Used Defense Sites
DOD ..... Department of Defense Sites
SCRD DRYCLEANERS ..... State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR ..... Financial Assurance Information
EPA WATCH LIST ..... EPA WATCH LIST
2020 COR ACTION ..... 2020 Corrective Action Program List

EXECUTIVE SUMMARY

TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
ROD	Records Of Decision
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
ICIS	Integrated Compliance Information System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
CONSENT	Superfund (CERCLA) Consent Decrees
INDIAN RESERV	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem
US MINES	Mines Master Index File
ABANDONED MINES	Abandoned Mines
UXO	Unexploded Ordnance Sites
DOCKET HWC	Hazardous Waste Compliance Docket Listing
FUELS PROGRAM	EPA Fuels Program Registered Listing
CA BOND EXP. PLAN	Bond Expenditure Plan
Cortese	"Cortese" Hazardous Waste & Substances Sites List
CUPA Listings	CUPA Resources List
DRYCLEANERS	Cleaner Facilities
EMI	Emissions Inventory Data
ENF	Enforcement Action Listing
Financial Assurance	Financial Assurance Information Listing
ICE	ICE
HWP	EnviroStor Permitted Facilities Listing
HWT	Registered Hazardous Waste Transporter Database
MINES	Mines Site Location Listing
MWMP	Medical Waste Management Program Listing
NPDES	NPDES Permits Listing
PEST LIC	Pesticide Regulation Licenses Listing
PROC	Certified Processors Database
UIC	UIC Listing
WASTEWATER PITS	Oil Wastewater Pits Listing
WDS	Waste Discharge System
WIP	Well Investigation Program Case List

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	EDR Proprietary Manufactured Gas Plants

EXECUTIVE SUMMARY

EDR Hist Cleaner..... EDR Exclusive Historic Dry Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF..... Recovered Government Archive Solid Waste Facilities List
RGA LUST..... Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA generators list

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 12/12/2016 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
PATRICIAN FINISHES	322 KING ST	NNW 1/8 - 1/4 (0.208 mi.)	8	12

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk

characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 01/30/2017 has revealed that there are 4 ENVIROSTOR sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ROBISON PROPERTY	***827 EL CAMINO REAL***	***NNE 1/2 - 1 (0.810 mi.)***	***12***	***32***
Facility Id: 60001444				
Status: Active				
FORMER DEMMA PARCELS	104 AND 112 CEDAR	ENE 1/2 - 1 (0.893 mi.)	14	36
Facility Id: 60001045				
Status: Refer: 1248 Local Agency				
ARTON MANAGEMENT/INV	***570 EL CAMINO REAL***	***N 1/2 - 1 (0.924 mi.)***	***15***	***37***
Facility Id: 41550010				
Status: Refer: Other Agency				
COOKS AUTO BODY	***1104 MAIN STREET***	***NE 1/2 - 1 (0.940 mi.)***	***16***	***40***
Facility Id: 60001847				
Status: Inactive - Action Required				

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 3 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
JEFFERSON CHEVRON	***3139 JEFFERSON AVE***	***SW 1/4 - 1/2 (0.393 mi.)***	***9***	***13***
Database: LUST REG 2, Date of Government Version: 09/30/2004				
Database: SAN MATEO CO. LUST, Date of Government Version: 03/15/2017				
Database: LUST, Date of Government Version: 03/13/2017				
Status: Open - Verification Monitoring				
Facility Status: Pollution Characterization				
Facility Id: 330179				
Facility Status: 5C- Pollution Characterization				
Global Id: T0608189635				
Global ID: T0608189635				

Lower Elevation	Address	Direction / Distance	Map ID	Page
REDWOOD CITY SCHOOL	***601 JAMES AVE.***	***NNE 1/4 - 1/2 (0.396 mi.)***	***C10***	***28***
Database: LUST REG 2, Date of Government Version: 09/30/2004				
Facility Status: Case Closed				
date9: 8/5/2002				
REDWOOD CITY SCHOOL	***601 JAMES***	***NNE 1/4 - 1/2 (0.396 mi.)***	***C11***	***30***
Database: SAN MATEO CO. LUST, Date of Government Version: 03/15/2017				
Database: LUST, Date of Government Version: 03/13/2017				
Status: Completed - Case Closed				

Facility Id: 330068
Facility Status: 9- Case Closed
Global Id: T0608100420
Global ID: T0608100420

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Registered Storage Tanks

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there is 1 SWEEPS UST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CITY OF REDWOOD CITY Status: A Comp Number: 330169	2190 JEFFERSON	ENE 0 - 1/8 (0.021 mi.)	B4	11

Other Ascertainable Records

Hazardous Materials Business Plan, Hazardous Waste Generator, Underground Storage tanks

A review of the San Mateo Co. BI list, as provided by EDR, and dated 03/15/2017 has revealed that there is 1 San Mateo Co. BI site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
FIRE STATION #10 Facility Id: FA0011296	2190 JEFFERSON	ENE 0 - 1/8 (0.021 mi.)	B5	11

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there is 1 HIST CORTESE site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
REDWOOD CITY SCHOOL Reg Id: 41-0441	***601 JAMES***	***NNE 1/4 - 1/2 (0.396 mi.)***	***C11***	***30***

Notify 65: Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

A review of the Notify 65 list, as provided by EDR, and dated 12/16/2016 has revealed that there are 2 Notify 65 sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
OAK KNOLL STATION	590 CANYON ROAD	W 1/2 - 1 (0.996 mi.)	17	55
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
TOWNE FORD SALES	***1601 EL CAMINO REAL***	***ENE 1/2 - 1 (0.812 mi.)***	***13***	***34***

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there are 2 EDR Hist Auto sites within approximately 0.125 miles of the target property.

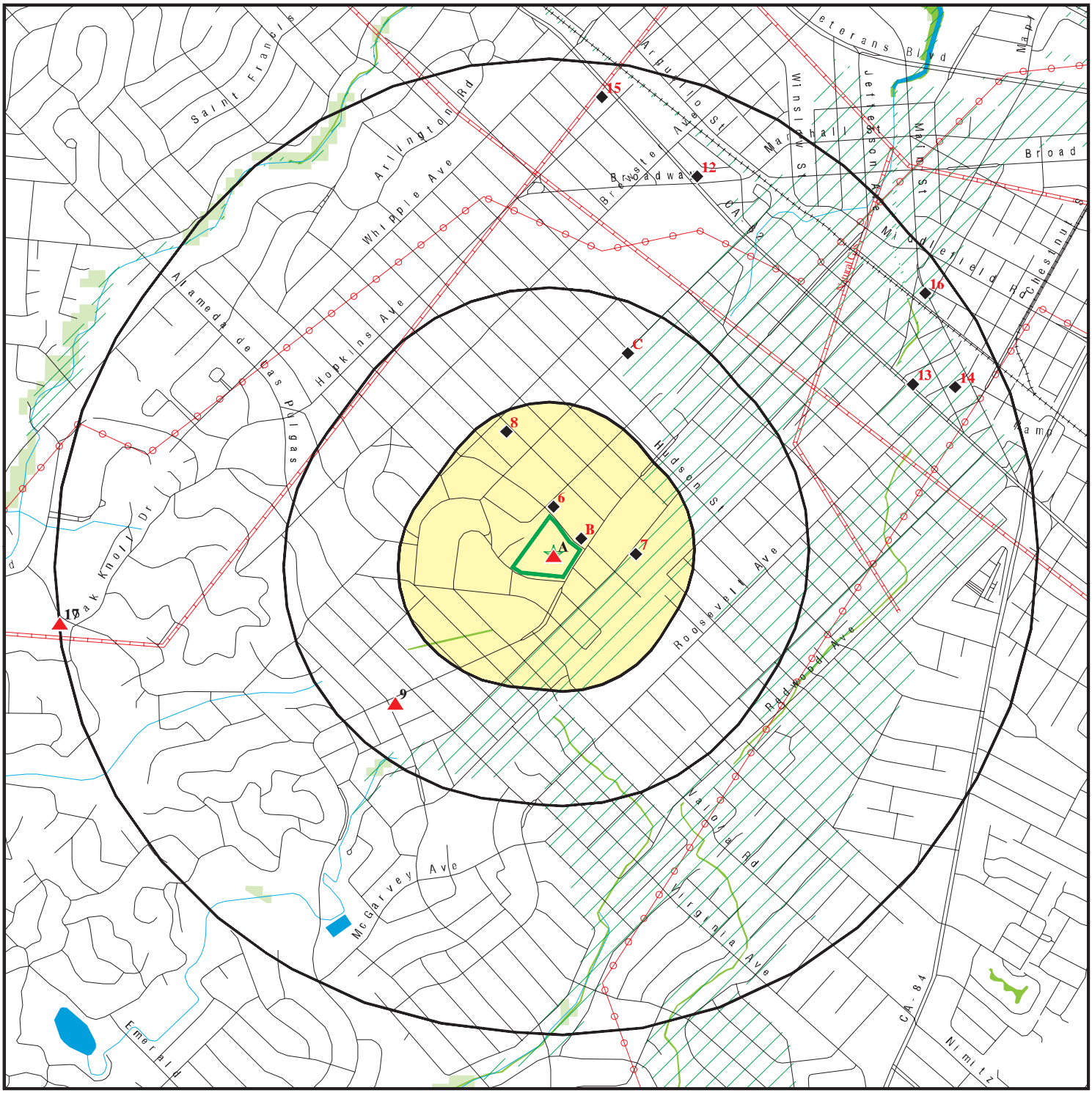
Lower Elevation	Address	Direction / Distance	Map ID	Page
WEST BAY MOBILE AUTO	1135 HARRISON AVE	N 0 - 1/8 (0.023 mi.)	6	12
GLOBAL GARAGE LLC	1105 MADISON AVE	E 0 - 1/8 (0.123 mi.)	7	12

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 2 records.

Site Name	Database(s)
SEQUOIA ALTERNATIVE SCHOOL	ENVIROSTOR, SCH
SEQUOIA STATION SHOPPING CENTER	ENVIROSTOR

OVERVIEW MAP - 4955887.16S



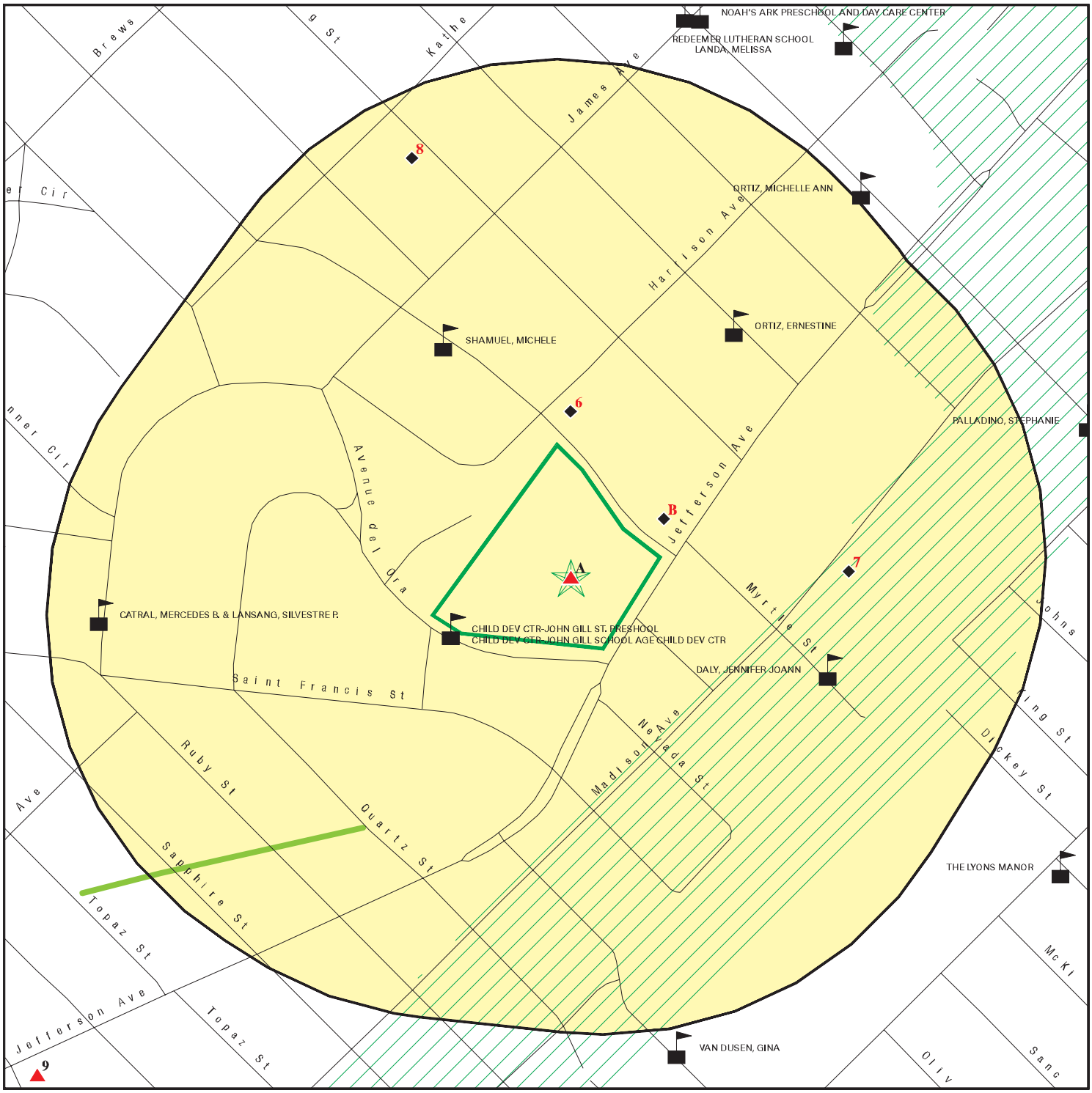
- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Pipelines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: John Gill Elementary School ADDRESS: 555 Avenue Del Ora Redwood City CA 94062 LAT/LONG: 37.47439 / 122.240558	CLIENT: McCloskey Consultants Inc CONTACT: Tom Mccloskey INQUIRY #: 4955887.16s DATE: June 05, 2017 10:10 am

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DETAIL MAP - 4955887.16S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

0 1/16 1/8 1/4 Miles

Indian Reservations BIA

100-year flood zone

500-year flood zone

National Wetland Inventory

State Wetlands

Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: John Gill Elementary School	CLIENT: McCloskey Consultants Inc
ADDRESS: 555 Avenue Del Ora Redwood City CA 94062	CONTACT: Tom Mccloskey
LAT/LONG: 37.47439 / 122.240558	INQUIRY #: 4955887.16s DATE: June 05, 2017 10:13 am

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	0.001		0	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250	1	0	1	NR	NR	NR	2
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		0	0	0	4	NR	4
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	0	3	NR	NR	3

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
SLIC	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		1	0	NR	NR	NR	1
HIST UST	0.250		0	0	NR	NR	NR	0
CA FID UST	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	0.001		0	NR	NR	NR	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.001		0	NR	NR	NR	NR	0
FINDS	0.001	1	0	NR	NR	NR	NR	1
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
ECHO	0.001	1	0	NR	NR	NR	NR	1
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
San Mateo Co. BI	0.250		1	0	NR	NR	NR	1
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	0.001		0	NR	NR	NR	NR	0
ENF	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
HAZNET	0.001	3	0	NR	NR	NR	NR	3
ICE	0.001		0	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	0	1	NR	NR	1
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.001		0	NR	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
PEST LIC	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	2	NR	2
UIC	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001		0	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		2	NR	NR	NR	NR	2
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		6	4	1	4	6	0	21

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 **REDWOOD CITY SD-JOHN GILL ELEMENTARY** **HAZNET** **S112954270**
Target Property **555 AVENUE DEL ORA** **N/A**
REDWOOD CITY, CA 94062

Site 1 of 3 in cluster A

Actual: 59 ft.

HAZNET:

envid:	S112954270
Year:	2006
GEPAID:	CAC002604890
Contact:	LEE CHANDLER
Telephone:	6505692374
Mailing Name:	Not reported
Mailing Address:	601 JAMES AVE
Mailing City,St,Zip:	REDWOOD CITY, CA 94062
Gen County:	Not reported
TSD EPA ID:	CAD028409019
TSD County:	Not reported
Waste Category:	Asbestos containing waste
Disposal Method:	Transfer Station
Tons:	0.21
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	San Mateo

A2 **REDWOOD CITY SCHOOL DIST** **RCRA-SQG** **1000438508**
Target Property **555 AVENUE DE ORA** **FINDS** **CAD981162894**
REDWOOD CITY, CA 94062 **ECHO**
HAZNET

Site 2 of 3 in cluster A

Actual: 59 ft.

RCRA-SQG:

Date form received by agency:	09/01/1996
Facility name:	REDWOOD CITY SCHOOL DIST
Facility address:	555 AVENUE DE ORA REDWOOD CITY, CA 94062
EPA ID:	CAD981162894
Mailing address:	815 ALLERTON ST REDWOOD CITY, CA 94063
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212

REDWOOD CITY SCHOOL DIST (Continued) **1000438508**

Legal status: District
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: REDWOOD CITY SCHOOL DIST
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: District
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 11/14/1985
Site name: REDWOOD CITY SCHOOL DIST
Classification: Large Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110002679290

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

REDWOOD CITY SCHOOL DIST (Continued) **1000438508**

Envid: 1000438508
Registry ID: 110002679290
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110002679290

HAZNET:
envid: 1000438508
Year: 1998
GEPAID: CAD981162894
Contact: Not reported
Telephone: 0000000000
Mailing Name: Not reported
Mailing Address: 2317 BROADWAY STE 10
Mailing City,St,Zip: REDWOOD CITY, CA 940631360
Gen County: Not reported
TSD EPA ID: CAL000027741
TSD County: Not reported
Waste Category: Asbestos containing waste
Disposal Method: Disposal, Land Fill
Tons: 2.5284
Cat Decode: Not reported
Method Decode: Not reported
Facility County: San Mateo

envid: 1000438508
Year: 1997
GEPAID: CAD981162894
Contact: Not reported
Telephone: 0000000000
Mailing Name: Not reported
Mailing Address: 2317 BROADWAY STE 10
Mailing City,St,Zip: REDWOOD CITY, CA 940631360
Gen County: Not reported
TSD EPA ID: CAD982042475
TSD County: Not reported
Waste Category: Asbestos containing waste
Disposal Method: Disposal, Land Fill
Tons: 10.1136
Cat Decode: Not reported
Method Decode: Not reported
Facility County: San Mateo

A3 **REDWOOD CITY SD-JOHN GILL ELEMENTARY** **HAZNET** **S112938963**
Target **555 AVENUE DEL ORA** **N/A**
Property **REDWOOD CITY, CA 94062**

Site 3 of 3 in cluster A

Actual: 59 ft.

HAZNET:
envid: S112938963
Year: 2004
GEPAID: CAC002579747
Contact: DON DIAS
Telephone: 6505692374
Mailing Name: Not reported
Mailing Address: 750 BRADFORD ST
Mailing City,St,Zip: REDWOOD CITY, CA 940631360
Gen County: Not reported

REDWOOD CITY SD-JOHN GILL ELEMENTARY (Continued) **S112938963**

TSD EPA ID: CAD028409019
TSD County: Not reported
Waste Category: Other organic solids
Disposal Method: Transfer Station
Tons: 0.08
Cat Decode: Not reported
Method Decode: Not reported
Facility County: San Mateo

B4
ENE
< 1/8
0.021 mi.
112 ft.

CITY OF REDWOOD CITY/FIRE STATION #2 **SWEEPS UST** **S106924633**
2190 JEFFERSON **N/A**
REDWOOD CITY, CA 94063

Site 1 of 2 in cluster B

Relative:
Lower

Actual:
37 ft.

SWEEPS UST:
Status: Active
Comp Number: 330169
Number: 4
Board Of Equalization: Not reported
Referral Date: 05-16-94
Action Date: 05-16-94
Created Date: 05-16-94
Owner Tank Id: Not reported
SWRCB Tank Id: Not reported
Tank Status: Not reported
Capacity: Not reported
Active Date: Not reported
Tank Use: Not reported
STG: Not reported
Content: Not reported
Number Of Tanks: Not reported

B5
ENE
< 1/8
0.021 mi.
112 ft.

FIRE STATION #10 **San Mateo Co. BI** **S113755647**
2190 JEFFERSON **N/A**
REDWOOD CITY, CA 94063

Site 2 of 2 in cluster B

Relative:
Lower

Actual:
37 ft.

San Mateo Co. BI:
Region: SAN MATEO
Facility ID: FA0011296
Prog Element Code: STORES MV FUELS OR WASTE ONLY
Record Id: PR0023517
Description: STORES MV FUELS OR WASTE ONLY
Facility Status: INACTIVE

Region: SAN MATEO
Facility ID: FA0011296
Prog Element Code: UNDERGROUND TANK - GENERAL
Record Id: PR0022463
Description: UNDERGROUND TANK - GENERAL
Facility Status: INACTIVE

6
North
< 1/8
0.023 mi.
124 ft.

WEST BAY MOBILE AUTO TRUCK SVC
1135 HARRISON AVE
REDWOOD CITY, CA 94062

EDR Hist Auto **1021288393**
N/A

Relative:
Lower

Actual:
36 ft.

EDR Hist Auto

Year:	Name:	Type:
2005	WEST BAY MOBILE AUTO TRUCK SVC	General Automotive Repair Shops
2006	WEST BAY MOBILE AUTO TRUCK SVC	General Automotive Repair Shops
2007	WEST BAY MOBILE AUTO TRUCK SVC	General Automotive Repair Shops
2008	WEST BAY MOBILE AUTO TRUCK SVC	General Automotive Repair Shops
2009	WEST BAY MOBILE AUTO TRUCK SVC	General Automotive Repair Shops
2010	WEST BAY MOBILE AUTO TRUCK SVC	General Automotive Repair Shops
2011	WEST BAY MOBILE AUTO TRUCK SVC	General Automotive Repair Shops
2012	WEST BAY MOBILE AUTO TRUCK SVC	General Automotive Repair Shops
2013	WEST BAY MOBILE AUTO TRUCK SVC	General Automotive Repair Shops
2014	WEST BAY MOBILE AUTO TRUCK SVC	General Automotive Repair Shops

---

7
East
< 1/8
0.123 mi.
648 ft.

GLOBAL GARAGE LLC
1105 MADISON AVE
REDWOOD CITY, CA 94061

EDR Hist Auto **1020274345**
N/A

Relative:
Lower

Actual:
34 ft.

EDR Hist Auto

Year:	Name:	Type:
2007	GLOBAL GARAGE LLC	General Automotive Repair Shops
2008	GLOBAL GARAGE LLC	General Automotive Repair Shops
2009	GLOBAL GARAGE LLC	General Automotive Repair Shops
2010	GLOBAL GARAGE LLC	General Automotive Repair Shops
2011	GLOBAL GARAGE LLC	General Automotive Repair Shops
2012	GLOBAL GARAGE LLC	General Automotive Repair Shops
2013	GLOBAL GARAGE LLC	General Automotive Repair Shops
2014	GLOBAL GARAGE LLC	General Automotive Repair Shops

8
NNW
1/8-1/4
0.208 mi.
1099 ft.

PATRICIAN FINISHES
322 KING ST
REDWOOD CITY, CA 94062

RCRA-SQG **1001959733**
CAR000060194

Relative:
Lower

Actual:
32 ft.

RCRA-SQG:

Date form received by agency:	12/09/1999
Facility name:	PATRICIAN FINISHES
Facility address:	322 KING ST REDWOOD CITY, CA 94062
EPA ID:	CAR000060194
Contact:	WILLIAM HASTY
Contact address:	322 KING ST REDWOOD CITY, CA 94062
Contact country:	US
Contact telephone:	(650) 369-9765
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator

PATRICIAN FINISHES (Continued) **1001959733**

Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	WILLIAM HASTY
Owner/operator address:	322 KING ST REDWOOD CITY, CA 94062
Owner/operator country:	Not reported
Owner/operator telephone:	(650) 222-4765
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

. Waste code: D001
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

---

9 SW 1/4-1/2 0.393 mi. 2073 ft.

Relative: Higher

Actual: 69 ft.

JEFFERSON CHEVRON **LUST U001594477**
3139 JEFFERSON AVE **HIST UST N/A**
REDWOOD CITY, CA 94061

LUST:

Region:	STATE
Global Id:	T0608189635
Latitude:	37.4697007062595
Longitude:	-122.246851846576
Case Type:	LUST Cleanup Site
Status:	Open - Verification Monitoring
Status Date:	07/27/2011
Lead Agency:	SAN MATEO COUNTY LOP
Case Worker:	DGM
Local Agency:	SAN MATEO COUNTY LOP
RB Case Number:	41-4019
LOC Case Number:	330179

JEFFERSON CHEVRON (Continued) **U001594477**

File Location: Local Agency
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Can be extracted from most recent report in Geotracker or at San Mateo County offices if submitted prior to 2005, San Mateo County does not take responsibility for the accuracy of the statements made or any professional interpretations made in the referenced report.

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0608189635
Contact Type: Local Agency Caseworker
Contact Name: DENO MILANO
Organization Name: SAN MATEO COUNTY LOP
Address: 2000 ALAMEDA DE LAS PULGAS
City: SAN MATEO
Email: dmilano@smcgov.org
Phone Number: 6503726292

Global Id: T0608189635
Contact Type: Regional Board Caseworker
Contact Name: Regional Water Board
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Address: 1515 CLAY ST SUITE 1400
City: OAKLAND
Email: Not reported
Phone Number: Not reported

Status History:
Global Id: T0608189635
Status: Open - Case Begin Date
Status Date: 06/03/1999

Global Id: T0608189635
Status: Open - Site Assessment
Status Date: 12/30/1999

Global Id: T0608189635
Status: Open - Verification Monitoring
Status Date: 07/27/2011

Regulatory Activities:
Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 09/05/2012
Action: Staff Letter - #20120905

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 07/17/2013
Action: Staff Letter - #20130717

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 05/07/2013
Action: Technical Correspondence / Assistance / Other - #20130507

JEFFERSON CHEVRON (Continued) **U001594477**

Global Id: T0608189635
Action Type: RESPONSE
Date: 05/15/2011
Action: Monitoring Report - Semi-Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/15/2010
Action: Electronic Reporting Submittal Due

Global Id: T0608189635
Action Type: RESPONSE
Date: 09/08/2008
Action: Other Report / Document

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/16/2015
Action: Soil Vapor Intrusion Investigation Report

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 02/14/2011
Action: Notice of Violation - #20110214

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 02/14/2017
Action: Email Correspondence - #20170214

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 01/24/2013
Action: Technical Correspondence / Assistance / Other - #20130124

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 10/04/2005
Action: Staff Letter - #20051004

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 08/19/2004
Action: Staff Letter - #20041019

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 05/30/2003
Action: Staff Letter - #20030530

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 07/15/2003
Action: Notice of Violation - #20030715

Global Id: T0608189635
Action Type: ENFORCEMENT

JEFFERSON CHEVRON (Continued) **U001594477**

Date: 09/13/2004
Action: Staff Letter - #20040913

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 05/15/2003
Action: Staff Letter - #20030515

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 08/06/2003
Action: Staff Letter - #20030806

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 12/15/2003
Action: Staff Letter - #20031215B

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 11/12/2003
Action: Verbal Enforcement - #20031112

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 09/12/2005
Action: Staff Letter - #20050912

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 08/27/2003
Action: Staff Letter - #20030827

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 09/04/2007
Action: Technical Correspondence / Assistance / Other - #20070904

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 02/24/2006
Action: Staff Letter - #20060224A

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 02/24/2006
Action: Staff Letter - #20060224

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 05/08/2006
Action: Staff Letter - #20060508

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 05/29/2003
Action: Staff Letter - #20030529A

JEFFERSON CHEVRON (Continued) **U001594477**

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 05/29/2003
Action: Staff Letter - #20030529B

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 09/05/2003
Action: Technical Correspondence / Assistance / Other - #20030905

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 07/15/2003
Action: Staff Letter - #20030715

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 08/27/2003
Action: Rescission of Enforcement Action - #20030827

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 11/03/2003
Action: Staff Letter - #20031103B

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 12/18/2003
Action: Technical Correspondence / Assistance / Other - #20031218

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 12/15/2003
Action: Staff Letter - #20031215A

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 03/15/2004
Action: Staff Letter - #20040315

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 05/08/2008
Action: Staff Letter - #20080508

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 02/03/2004
Action: Technical Correspondence / Assistance / Other - #20040203

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 09/03/2003
Action: Staff Letter - #20030903A

Global Id: T0608189635
Action Type: RESPONSE

JEFFERSON CHEVRON (Continued) **U001594477**

Date: 01/26/2003
Action: Other Workplan

Global Id: T0608189635
Action Type: RESPONSE
Date: 06/26/2003
Action: Other Report / Document

Global Id: T0608189635
Action Type: RESPONSE
Date: 05/15/2009
Action: Risk Assessment Report

Global Id: T0608189635
Action Type: RESPONSE
Date: 05/15/2008
Action: Monitoring Report - Semi-Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 12/10/2008
Action: Soil and Water Investigation Report

Global Id: T0608189635
Action Type: RESPONSE
Date: 12/31/2015
Action: Well Destruction Report

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 11/14/2007
Action: Staff Letter - #20071114

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 06/11/2007
Action: Notice of Violation - #20070611

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 11/14/2007
Action: Notice of Violation - #20071114

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 06/11/2007
Action: Staff Letter - #20070611

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 02/11/2004
Action: Staff Letter - #20040211B

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 07/14/1999
Action: Notice of Responsibility - #19990714

JEFFERSON CHEVRON (Continued) **U001594477**

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 01/28/2008
Action: Staff Letter - #20080128

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 01/26/2004
Action: Technical Correspondence / Assistance / Other - #20040126

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 12/11/2003
Action: Staff Letter - #20031211

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 11/16/2004
Action: Staff Letter - #20041116

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 02/10/2004
Action: Technical Correspondence / Assistance / Other - #20040210

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 03/18/2004
Action: Staff Letter - #20040318

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 09/09/2004
Action: Technical Correspondence / Assistance / Other - #20040904

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 07/27/2011
Action: Staff Letter - #20110727

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 09/02/2015
Action: Staff Letter - #20150902

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 07/26/2012
Action: Technical Correspondence / Assistance / Other - #20120726

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 07/26/2012
Action: Technical Correspondence / Assistance / Other - #20120726

Global Id: T0608189635
Action Type: ENFORCEMENT

JEFFERSON CHEVRON (Continued) **U001594477**

Date: 04/29/2013
Action: Notice of Violation - #20130429

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 07/23/2008
Action: Staff Letter - #20080723

Global Id: T0608189635
Action Type: RESPONSE
Date: 07/13/2005
Action: Soil and Water Investigation Workplan

Global Id: T0608189635
Action Type: RESPONSE
Date: 02/02/2006
Action: Soil and Water Investigation Report

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/04/2005
Action: NPDES / WDR Reports

Global Id: T0608189635
Action Type: RESPONSE
Date: 03/30/2004
Action: Electronic Reporting Submittal Due

Global Id: T0608189635
Action Type: RESPONSE
Date: 03/30/2004
Action: Other Workplan

Global Id: T0608189635
Action Type: RESPONSE
Date: 12/17/2009
Action: Clean Up Fund - 5-Year Review Summary

Global Id: T0608189635
Action Type: RESPONSE
Date: 05/15/2015
Action: Monitoring Report - Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/15/2015
Action: Electronic Reporting Submittal Due

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 03/04/2015
Action: Staff Letter - #20150304

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 05/22/2014
Action: Technical Correspondence / Assistance / Other - #20140522

JEFFERSON CHEVRON (Continued) **U001594477**

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 10/20/2014
Action: Staff Letter - #20141020

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 05/08/2013
Action: Staff Letter - #20130508

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 12/06/2016
Action: Staff Letter - #20161206

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 05/04/2016
Action: Notice of Violation - #20160524

Global Id: T0608189635
Action Type: RESPONSE
Date: 08/30/2010
Action: Risk Assessment Report

Global Id: T0608189635
Action Type: RESPONSE
Date: 01/26/2005
Action: Other Workplan

Global Id: T0608189635
Action Type: RESPONSE
Date: 01/26/2005
Action: Soil and Water Investigation Workplan - Addendum

Global Id: T0608189635
Action Type: RESPONSE
Date: 01/30/2010
Action: Other Report / Document

Global Id: T0608189635
Action Type: RESPONSE
Date: 03/26/2004
Action: Tank Removal Report / UST Sampling Report

Global Id: T0608189635
Action Type: RESPONSE
Date: 05/15/2016
Action: Monitoring Report - Annually

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 11/30/2009
Action: Staff Letter - #20091130

Global Id: T0608189635
Action Type: ENFORCEMENT

JEFFERSON CHEVRON (Continued) **U001594477**

Date: 01/04/2016
Action: Email Correspondence - #20160104

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 05/11/2016
Action: Staff Letter - #20160511

Global Id: T0608189635
Action Type: RESPONSE
Date: 10/17/2008
Action: Clean Up Fund - 5-Year Review Summary

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/15/2011
Action: Electronic Reporting Submittal Due

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 01/19/2017
Action: Email Correspondence - #20170119

Global Id: T0608189635
Action Type: Other
Date: 07/15/1999
Action: Leak Reported

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/15/2012
Action: Electronic Reporting Submittal Due

Global Id: T0608189635
Action Type: RESPONSE
Date: 05/15/2012
Action: Monitoring Report - Annually

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 11/26/2003
Action: Staff Letter - #20031126

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 05/18/2005
Action: Staff Letter - #20050518

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 11/03/2003
Action: Staff Letter - #20031103A

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 04/30/2013
Action: Staff Letter - #20130430

JEFFERSON CHEVRON (Continued) **U001594477**

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 12/27/2012
Action: Notice of Violation - #20121227

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/15/2008
Action: Monitoring Report - Semi-Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/15/2009
Action: Monitoring Report - Semi-Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 09/30/2007
Action: Other Report / Document

Global Id: T0608189635
Action Type: RESPONSE
Date: 10/27/2003
Action: Correspondence

Global Id: T0608189635
Action Type: RESPONSE
Date: 05/15/2009
Action: Monitoring Report - Semi-Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 03/30/2004
Action: Correspondence

Global Id: T0608189635
Action Type: RESPONSE
Date: 06/22/2005
Action: Well Installation Report

Global Id: T0608189635
Action Type: RESPONSE
Date: 05/15/2010
Action: Monitoring Report - Semi-Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 01/26/2004
Action: Other Workplan

Global Id: T0608189635
Action Type: RESPONSE
Date: 04/20/2004
Action: Soil and Water Investigation Workplan

Global Id: T0608189635
Action Type: RESPONSE

JEFFERSON CHEVRON (Continued) **U001594477**

Date: 05/16/2005
Action: Monitoring Report - Semi-Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 05/15/2006
Action: Monitoring Report - Semi-Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 05/15/2007
Action: Monitoring Report - Semi-Annually

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 08/05/2009
Action: Staff Letter - #20090805

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 09/03/2003
Action: Staff Letter - #20030903B

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 09/17/2003
Action: Staff Letter - #20030917

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 08/19/2004
Action: Staff Letter - #20040819A

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 05/09/2013
Action: Notice of Responsibility - #20130509

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/14/2008
Action: Risk Assessment Report

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/15/2016
Action: Electronic Reporting Submittal Due

Global Id: T0608189635
Action Type: RESPONSE
Date: 05/15/2014
Action: Monitoring Report - Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 05/15/2013
Action: Monitoring Report - Annually

JEFFERSON CHEVRON (Continued) **U001594477**

Global Id: T0608189635
Action Type: RESPONSE
Date: 04/10/2014
Action: Soil Vapor Intrusion Investigation Report

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/15/2013
Action: Electronic Reporting Submittal Due

Global Id: T0608189635
Action Type: RESPONSE
Date: 10/31/2012
Action: Soil Vapor Intrusion Investigation Workplan - Regulator Responded

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 02/28/2012
Action: Staff Letter - #20120228

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 12/28/2016
Action: Email Correspondence - #20161228

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 09/09/2015
Action: Staff Letter - #20150909

Global Id: T0608189635
Action Type: RESPONSE
Date: 07/15/2003
Action: NPDES / WDR Reports

Global Id: T0608189635
Action Type: RESPONSE
Date: 04/26/2004
Action: NPDES / WDR Reports

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/28/2007
Action: Risk Assessment Report

Global Id: T0608189635
Action Type: RESPONSE
Date: 08/29/2007
Action: Other Workplan

Global Id: T0608189635
Action Type: RESPONSE
Date: 06/04/2008
Action: Soil and Water Investigation Report

Global Id: T0608189635
Action Type: ENFORCEMENT

JEFFERSON CHEVRON (Continued) **U001594477**

Date: 08/01/2003
Action: Injunctive Relief

Global Id: T0608189635
Action Type: Other
Date: 06/03/1999
Action: Leak Discovery

Global Id: T0608189635
Action Type: ENFORCEMENT
Date: 02/11/2004
Action: Staff Letter - #20040211A

Global Id: T0608189635
Action Type: RESPONSE
Date: 09/08/2003
Action: Soil and Water Investigation Report

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/15/2004
Action: Monitoring Report - Semi-Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/15/2005
Action: Monitoring Report - Semi-Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/15/2006
Action: Monitoring Report - Semi-Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/15/2007
Action: Monitoring Report - Semi-Annually

Global Id: T0608189635
Action Type: RESPONSE
Date: 12/09/2004
Action: Other Report / Document

Global Id: T0608189635
Action Type: RESPONSE
Date: 01/26/2005
Action: Other Report / Document

Global Id: T0608189635
Action Type: RESPONSE
Date: 01/26/2005
Action: Monitoring Report - Other

Global Id: T0608189635
Action Type: RESPONSE
Date: 11/15/2014
Action: Electronic Reporting Submittal Due

JEFFERSON CHEVRON (Continued) **U001594477**

Global Id: T0608189635
Action Type: REMEDIATION
Date: 06/03/1999
Action: Excavation

Global Id: T0608189635
Action Type: REMEDIATION
Date: 01/16/2004
Action: Pump & Treat (P&T) Groundwater

Global Id: T0608189635
Action Type: REMEDIATION
Date: 01/12/2004
Action: Excavation

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Pollution Characterization
Case Number: 330179
How Discovered: SA
Leak Cause: Unknown
Leak Source: Unknown
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: 12/30/1999
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

SAN MATEO CO. LUST:
Region: SAN MATEO
Facility ID: 330179
Facility Status: 5C- Pollution Characterization
Global ID: T0608189635
APN Number: 058322100
Case Type: SAN MATEO CO. LUST
EDR Link ID: SAN MATEO CO. LUST

HIST UST:
File Number: 0002C014
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002C014.pdf
Region: STATE
Facility ID: 00000058986
Facility Type: Gas Station
Other Type: Not reported
Contact Name: MICHAEL J. MACCHIA
Telephone: 4153663789
Owner Name: MAC-GO INC.
Owner Address: 868 ALTOS OAKS DR.
Owner City,St,Zip: LOS ALTOS, CA 94022
Total Tanks: 0005

JEFFERSON CHEVRON (Continued) **U001594477**

Tank Num: 001
Container Num: 1
Year Installed: Not reported
Tank Capacity: 00004000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Tank Num: 002
Container Num: 2
Year Installed: Not reported
Tank Capacity: 00000000
Tank Used for: PRODUCT
Type of Fuel: PREMIUM
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Tank Num: 003
Container Num: 3
Year Installed: Not reported
Tank Capacity: 00000000
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Container Construction Thickness: Not reported
Leak Detection: None

Tank Num: 004
Container Num: 4
Year Installed: Not reported
Tank Capacity: 00008000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Tank Num: 005
Container Num: 5
Year Installed: Not reported
Tank Capacity: 00004000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Click here for Geo Tracker PDF:

C10 **REDWOOD CITY SCHOOL DISTRICT** **LUST** **U001594512**
NNE **601 JAMES AVE.** **UST** **N/A**
1/4-1/2 **REDWOOD CITY, CA 94062** **SWEEPS UST**
0.396 mi. **HIST UST**
2091 ft. **Site 1 of 2 in cluster C**

Relative:
Lower

Actual:
22 ft.

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 330068

REDWOOD CITY SCHOOL DISTRICT (Continued) **U001594512**

How Discovered: OM
Leak Cause: Unknown
Leak Source: Unknown
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

UST:
Facility ID: 41-000-330153
Permitting Agency: SAN MATEO COUNTY
Latitude: 37.48086
Longitude: -122.23761

Facility ID: Not reported
Permitting Agency: San Mateo County Environmental Health
Latitude: 37.480701
Longitude: -122.237549

SWEEPS UST:
Status: Active
Comp Number: 330153
Number: 6
Board Of Equalization: Not reported
Referral Date: 05-14-94
Action Date: 05-14-94
Created Date: 04-26-93
Owner Tank Id: L212006-01
SWRCB Tank Id: 41-000-330153-000001
Tank Status: A
Capacity: 2500
Active Date: 04-07-94
Tank Use: M.V. FUEL
STG: P
Content: PRM UNLEADED
Number Of Tanks: 1

HIST UST:
File Number: Not reported
URL: Not reported
Region: STATE
Facility ID: 00000056768
Facility Type: Other
Other Type: VEHICLE YARD
Contact Name: DONALD K. MARCUS
Telephone: 4153644586
Owner Name: REDWOOD CITY SCHOOL DISTRICT
Owner Address: 815 ALLERTON STREET
Owner City,St,Zip: REDWOOD CITY, CA 94063
Total Tanks: 0003

Tank Num: 001

REDWOOD CITY SCHOOL DISTRICT (Continued) **U001594512**

Container Num:	59212-1
Year Installed:	1967
Tank Capacity:	00002000
Tank Used for:	PRODUCT
Type of Fuel:	PREMIUM
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor
Tank Num:	002
Container Num:	3
Year Installed:	Not reported
Tank Capacity:	00000200
Tank Used for:	WASTE
Type of Fuel:	WASTE OIL
Container Construction Thickness:	Not reported
Leak Detection:	None
Tank Num:	003
Container Num:	2
Year Installed:	Not reported
Tank Capacity:	00001000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor

C11 **REDWOOD CITY SCHOOL DISTR** **LUST** **S104161767**
NNE **601 JAMES** **HIST CORTESE** **N/A**
1/4-1/2 **REDWOOD CITY, CA 94063**
0.396 mi.
2091 ft. **Site 2 of 2 in cluster C**

Relative:
Lower

Actual:
22 ft.

LUST:

Region:	STATE
Global Id:	T0608100420
Latitude:	37.4816307
Longitude:	-122.2366291
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	08/05/2002
Lead Agency:	SAN MATEO COUNTY LOP
Case Worker:	DGM
Local Agency:	SAN MATEO COUNTY LOP
RB Case Number:	41-0441
LOC Case Number:	330068
File Location:	Local Agency
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0608100420
Contact Type:	Local Agency Caseworker
Contact Name:	DENO MILANO
Organization Name:	SAN MATEO COUNTY LOP
Address:	2000 ALAMEDA DE LAS PULGAS

REDWOOD CITY SCHOOL DISTR (Continued) **S104161767**

City: SAN MATEO
Email: dmilano@smcgov.org
Phone Number: 6503726292

Global Id: T0608100420
Contact Type: Regional Board Caseworker
Contact Name: Regional Water Board
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Address: 1515 CLAY ST SUITE 1400
City: OAKLAND
Email: Not reported
Phone Number: Not reported

Status History:
Global Id: T0608100420
Status: Completed - Case Closed
Status Date: 08/05/2002

Global Id: T0608100420
Status: Open - Case Begin Date
Status Date: 04/26/1990

Regulatory Activities:
Global Id: T0608100420
Action Type: Other
Date: 04/26/1990
Action: Leak Reported

Global Id: T0608100420
Action Type: ENFORCEMENT
Date: 04/26/1990
Action: Notice of Responsibility - #1

Global Id: T0608100420
Action Type: REMEDIATION
Date: 07/03/1989
Action: Excavation

Global Id: T0608100420
Action Type: REMEDIATION
Date: 07/03/1989
Action: Pump & Treat (P&T) Groundwater

SAN MATEO CO. LUST:
Region: SAN MATEO
Facility ID: 330068
Facility Status: 9- Case Closed
Global ID: T0608100420
APN Number: 052202010
Case Type: SAN MATEO CO. LUST
EDR Link ID: SAN MATEO CO. LUST

HIST CORTESE:
Region: CORTESE

REDWOOD CITY SCHOOL DISTR (Continued) **S104161767**

Facility County Code: 41
Reg By: LTNKA
Reg Id: 41-0441

12
NNE
1/2-1
0.810 mi.
4278 ft.

ROBISON PROPERTY
827 EL CAMINO REAL
REDWOOD CITY, CA 94063

ENVIROSTOR
SLIC
VCP

S106131297
N/A

Relative:
Lower

Actual:
17 ft.

ENVIROSTOR:
Facility ID: 60001444
Status: Active
Status Date: 04/12/2011
Site Code: 201905
Site Type: Voluntary Cleanup
Site Type Detailed: Voluntary Cleanup
Acres: 0.4
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Charles (Chip) Gribble
Supervisor: Julie Pettijohn
Division Branch: Cleanup Berkeley
Assembly: 24
Senate: 13
Special Program: Voluntary Cleanup Program
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Responsible Party
Latitude: 37.46007
Longitude: -122.1959
APN: NONE SPECIFIED
Past Use: DRY CLEANING
Potential COC: Tetrachloroethylene (PCE Trichloroethylene (TCE
Confirmed COC: 30022-NO 30027-NO
Potential Description: SOIL, SV, UE
Alias Name: T0608127441
Alias Type: GeoTracker Global ID
Alias Name: 201905
Alias Type: Project Code (Site Code)
Alias Name: 60001444
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: Not reported
Completed Sub Area Name: Not reported
Completed Document Type: Not reported
Completed Date: Not reported
Comments: Not reported

Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Site Screening
Future Due Date: 2017
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported

ROBISON PROPERTY (Continued) **S106131297**

Schedule Due Date: Not reported
Schedule Revised Date: Not reported

SLIC:

Region:	STATE
Facility Status:	**Open - Site Assessment**
Status Date:	05/05/2008
Global Id:	T0608127441
Lead Agency:	DEPARTMENT OF TOXIC SUBSTANCES CONTROL
Lead Agency Case Number:	60001444
Latitude:	37.485911
Longitude:	-122.234502
Case Type:	Cleanup Program Site
Case Worker:	Not reported
Local Agency:	SAN MATEO COUNTY LOP
RB Case Number:	Not reported
File Location:	Local Agency
Potential Media Affected:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	* Chlorinated Hydrocarbons
Site History:	Can be extracted from most recent report in Geotracker or at San Mateo County offices if submitted prior to 2005, San Mateo County does not take responsibility for the accuracy of the statements made or any professional interpretations made in the referenced report.

Click here to access the California GeoTracker records for this facility:

VCP:

Facility ID:	60001444
Site Type:	Voluntary Cleanup
Site Type Detail:	Voluntary Cleanup
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	0.4
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Charles (Chip) Gribble
Supervisor:	Julie Pettijohn
Division Branch:	Cleanup Berkeley
Site Code:	201905
Assembly:	24
Senate:	13
Special Programs Code:	Voluntary Cleanup Program
Status:	Active
Status Date:	04/12/2011
Restricted Use:	NO
Funding:	Responsible Party
Lat/Long:	37.46007 / -122.1959
APN:	NONE SPECIFIED
Past Use:	DRY CLEANING
Potential COC:	30022, 30027
Confirmed COC:	30022-NO,30027-NO
Potential Description:	SOIL, SV, UE
Alias Name:	T0608127441
Alias Type:	GeoTracker Global ID
Alias Name:	201905

ROBISON PROPERTY (Continued) **S106131297**

Alias Type: Project Code (Site Code)
Alias Name: 60001444
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: Not reported
Completed Sub Area Name: Not reported
Completed Document Type: Not reported
Completed Date: Not reported
Comments: Not reported

Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Site Screening
Future Due Date: 2017
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

13
ENE
1/2-1
0.812 mi.
4287 ft.

TOWNE FORD SALES **LUST** **1000311542**
1601 EL CAMINO REAL **HIST UST** **N/A**
REDWOOD CITY, CA 94063 **Notify 65**

Relative:
Lower

Actual:
18 ft.

LUST:
Region: STATE
Global Id: T0608100547
Latitude: 37.4799709412402
Longitude: -122.225475311279
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 10/12/1995
Lead Agency: SAN MATEO COUNTY LOP
Case Worker: DGM
Local Agency: SAN MATEO COUNTY LOP
RB Case Number: 41-0573
LOC Case Number: 330023
File Location: Local Agency
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Waste Oil / Motor / Hydraulic / Lubricating
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0608100547
Contact Type: Local Agency Caseworker
Contact Name: DENO MILANO
Organization Name: SAN MATEO COUNTY LOP
Address: 2000 ALAMEDA DE LAS PULGAS
City: SAN MATEO
Email: dmilano@smcgov.org
Phone Number: 6503726292

Global Id: T0608100547
Contact Type: Regional Board Caseworker

TOWNE FORD SALES (Continued) **1000311542**

Contact Name: Regional Water Board
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Address: 1515 CLAY ST SUITE 1400
City: OAKLAND
Email: Not reported
Phone Number: Not reported

Status History:
Global Id: T0608100547
Status: Completed - Case Closed
Status Date: 10/12/1995

Global Id: T0608100547
Status: Open - Case Begin Date
Status Date: 12/20/1988

Regulatory Activities:
Global Id: T0608100547
Action Type: Other
Date: 12/22/1988
Action: Leak Discovery

Global Id: T0608100547
Action Type: ENFORCEMENT
Date: 05/28/1990
Action: Notice of Responsibility - #1

Global Id: T0608100547
Action Type: Other
Date: 12/20/1988
Action: Leak Reported

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 330023
How Discovered: OM
Leak Cause: Unknown
Leak Source: Unknown
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

SAN MATEO CO. LUST:
Region: SAN MATEO
Facility ID: 330023
Facility Status: 9- Case Closed
Global ID: T0608100547

TOWNE FORD SALES (Continued) **1000311542**

APN Number: 053185060
Case Type: SAN MATEO CO. LUST
EDR Link ID: SAN MATEO CO. LUST

HIST UST:
File Number: 0002C39C
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002C39C.pdf
Region: STATE
Facility ID: 00000004128
Facility Type: Other
Other Type: AUTO DEALER
Contact Name: TIM TOLAND
Telephone: 4153665744
Owner Name: TOWNE FORD SALES
Owner Address: 1601 EL CAMINO REAL
Owner City,St,Zip: REDWOOD CITY, CA 94063
Total Tanks: 0001

Tank Num: 001
Container Num: 1
Year Installed: 1956
Tank Capacity: 00001000
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Container Construction Thickness: Not reported
Leak Detection: None

Click here for Geo Tracker PDF:

NOTIFY 65:
Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Issue Date: Not reported
Incident Description: Not reported

---

14 **FORMER DEMMA PARCELS** **ENVIROSTOR** **S109422388**
ENE **104 AND 112 CEDAR** **N/A**
1/2-1 **REDWOOD CITY, CA 94063**
0.893 mi.
4716 ft.

Relative:
Lower

Actual:
19 ft.

ENVIROSTOR:
Facility ID: 60001045
Status: Refer: 1248 Local Agency
Status Date: 06/15/2006
Site Code: Not reported
Site Type: Evaluation
Site Type Detailed: Evaluation
Acres: 1
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Not reported
Supervisor: Referred - Not Assigned

FORMER DEMMA PARCELS (Continued) **S109422388**

Division Branch: Cleanup Berkeley
Assembly: 40
Senate: 23
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not Applicable
Latitude: 34.03204
Longitude: -117.1858
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: 60001045
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 06/15/2006
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

15
North
1/2-1
0.924 mi.
4877 ft.

ARTON MANAGEMENT/INVESTMENT COMPANY
570 EL CAMINO REAL
REDWOOD CITY, CA 94063

ENVIROSTOR **U001594591**
LUST **N/A**
HIST UST

Relative:
Lower

Actual:
22 ft.

ENVIROSTOR:
Facility ID: 41550010
Status: Refer: Other Agency
Status Date: 04/24/2002
Site Code: Not reported
Site Type: Evaluation
Site Type Detailed: Evaluation
Acres: Not reported
NPL: NO
Regulatory Agencies: SMBRP, SAN MATEO COUNTY
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Denise Tsuji
Division Branch: Cleanup Berkeley
Assembly: 22
Senate: 13
Special Program: Not reported
Restricted Use: NO

ARTON MANAGEMENT/INVESTMENT COMPANY (Continued) **U001594591**

Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 37.48894
Longitude: -122.2386
APN: 052181250
Past Use: RETAIL - SERVICE STATION, RETAIL - VEHICLES
Potential COC: * WASTE OIL & MIXED OIL TPH-diesel
Confirmed COC: TPH-diesel * WASTE OIL & MIXED OIL
Potential Description: SOIL
Alias Name: 052181250
Alias Type: APN
Alias Name: 41550010
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 02/28/1991
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 04/24/2002
Comments: Site screening completed. Site referred to San Mateo County Environmental Health Department.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

LUST:
Region: STATE
Global Id: T0608101054
Latitude: 37.488925
Longitude: -122.238638
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 04/30/1991
Lead Agency: SAN MATEO COUNTY LOP
Case Worker: DGM
Local Agency: SAN MATEO COUNTY LOP
RB Case Number: 41-1150
LOC Case Number: 330066
File Location: Local Agency Warehouse
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Not reported
Site History: Not reported

ARTON MANAGEMENT/INVESTMENT COMPANY (Continued) **U001594591**

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0608101054
Contact Type:	Local Agency Caseworker
Contact Name:	DENO MILANO
Organization Name:	SAN MATEO COUNTY LOP
Address:	2000 ALAMEDA DE LAS PULGAS
City:	SAN MATEO
Email:	dmilano@smcgov.org
Phone Number:	6503726292

Global Id:	T0608101054
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

Status History:

Global Id:	T0608101054
Status:	Completed - Case Closed
Status Date:	04/30/1991

Global Id:	T0608101054
Status:	Open - Case Begin Date
Status Date:	01/01/1989

Regulatory Activities:

Global Id:	T0608101054
Action Type:	ENFORCEMENT
Date:	01/01/1989
Action:	Notice of Responsibility - #1

Global Id:	T0608101054
Action Type:	Other
Date:	02/01/1990
Action:	Leak Reported

SAN MATEO CO. LUST:

Region:	SAN MATEO
Facility ID:	330066
Facility Status:	9- Case Closed
Global ID:	T0608101054
APN Number:	052181250
Case Type:	SAN MATEO CO. LUST
EDR Link ID:	SAN MATEO CO. LUST

HIST UST:

File Number:	0002C0B3
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002C0B3.pdf
Region:	STATE

ARTON MANAGEMENT/INVESTMENT COMPANY (Continued) **U001594591**

Facility ID:	00000009927
Facility Type:	Other
Other Type:	AUTO DEALERSHIP
Contact Name:	DENNIS HOYT, SERVICE MGR.
Telephone:	4153694131
Owner Name:	MRS. PAULINE M. BARNESON
Owner Address:	1523 HOPKINS ST
Owner City,St,Zip:	REDWOOD CITY, CA 94063
Total Tanks:	0001
Tank Num:	001
Container Num:	3
Year Installed:	Not reported
Tank Capacity:	00000200
Tank Used for:	WASTE
Type of Fuel:	WASTE OIL
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

Click here for Geo Tracker PDF:

---

16 **COOKS AUTO BODY** **RCRA-SQG** **1000272042**
NE **1104 MAIN STREET** **ENVIROSTOR** **CAD981457179**
1/2-1 **REDWOOD CITY, CA 94063** **LUST**
0.940 mi. **FINDS**
4961 ft. **ECHO**

Relative:
Lower

Actual:
14 ft.

RCRA-SQG:

Date form received by agency:	04/02/1986
Facility name:	COOKS AUTO BODY
Facility address:	1104 MAIN STREET REDWOOD CITY, CA 94063
EPA ID:	CAD981457179
Contact:	THOMAS FRISCHE
Contact address:	1104 MAIN STREET REDWOOD CITY, CA 94063
Contact country:	US
Contact telephone:	(415) 365-3206
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	WOODS AUTO BODY INC
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

COOKS AUTO BODY (Continued) **1000272042**

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

ENVIROSTOR:
Facility ID: 60001847
Status: Inactive - Action Required
Status Date: 01/31/2013
Site Code: 201958
Site Type: Evaluation
Site Type Detailed: Evaluation
Acres: 0.3
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: George Chow
Supervisor: Julie Pettijohn
Division Branch: Cleanup Berkeley
Assembly: 22
Senate: 13
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Responsible Party
Latitude: 37.48273
Longitude: -122.2259
APN: 053-138-010
Past Use: FUEL - VEHICLE STORAGE/ REFUELING
Potential COC: Lead
Confirmed COC: Lead
Potential Description: SOIL
Alias Name: 053-138-010

COOKS AUTO BODY (Continued) **1000272042**

Alias Type: APN
Alias Name: T0608183982
Alias Type: GeoTracker Global ID
Alias Name: 201958
Alias Type: Project Code (Site Code)
Alias Name: 60001847
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 07/27/2012
Comments: This letter from the San Mateo Groundwater Protection Program (GPP) to DTSC includes the GPP's case closure for the hydrocarbon releases at this site and refers the metals contamination to DTSC. A summary of the remedial activities completed to date (July 2012) and the closure rationale can be found in this document.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 01/28/2013
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

LUST:
Region: STATE
Global Id: T0608183982
Latitude: 37.4829524
Longitude: -122.226044167
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 03/22/2013
Lead Agency: SAN MATEO COUNTY LOP
Case Worker: DGM
Local Agency: SAN MATEO COUNTY LOP
RB Case Number: 41-4057
LOC Case Number: 330188
File Location: Local Agency
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Extracted from Golden Gate Environmental's March 31, 2010 Report of Groundwater Monitoring & Additional Site Characterization, San Mateo County does not take responsibility for the accuracy of the statements made or any professional interpretations made in the referenced report. The subject property lies on the west side of Main Street and south of the intersection of Main and Maple Streets in

COOKS AUTO BODY (Continued) **1000272042**

Redwood City, California. The Site is approximately 0.4 mile south of the San Francisco Bay (Redwood Creek Inlet). The elevation of the property ranges between 11.70 and 12.38 feet above mean sea level. The property is relatively flat lying with the local topographic relief generally directed towards the north-northeast. The 0.3-acre property is roughly triangular in shape. The adjacent property to the west (1090 Main Street) is a multi-residential apartment/townhouse complex. Directly to the northeast across Main Street is the former upholstery facility for Cooks Auto Body (1101\\% Main Street; currently vacant) and Bobs Auto Repair facility (415 Cassia Street). A 9,000 square foot office and warehouse structure occupies the central portion of the subject property and a small office structure (625 square feet) is situated along the southeastern portion of the Site. The northernmost portion of the Site is where the former fueling station was historically located and is the subject of this evaluation. County Assessor Recorders Parcel No. 053-138-010). Cooks Auto Body has leased the Site since 1979 for a vehicle repair operation. The Site had previously been occupied by another auto body facility since 1969. Reportedly, Cooks Auto Body has never dispensed fuel from the property since 1979. A concrete dispenser island 18 feet in length by 3 feet in width (east-west orientation) is located approximately 13 feet north of the central north side of the building structure. A hydraulic lift was formerly located approximately 7 feet north of the central north wall of the building structure. Based on recorded observations of the product and vent piping removed beneath the northern portion of the Site (May 2004), it is evident that at least three USTs were once present at the property prior to Cooks Auto Bodys initial occupancy in 1979. Historic businesses that formerly operated at the Site include: Strand and Brain garage (1931-1933), Strand and Furger Autos (1937), Tacoma Distributing Company/Brewers Agents (1939), and Ferris Miles Inc Wholesaler (1953). A Redwood City Tribune article titled Miles Selling Car Agency dated May 10, 1969, describes business operations conducted across the street at 1101 Main Street from the years 1939 to 1969 by the late Ferris Miles (deceased 1982). Miles apparently co-owned the property at 1104 Main Street during the time interval spanning from 1939 to 1969 and Ferris-Miles Dodge occupied the Site in the mid 1960s. Based on review of Sanborn Fire Insurance Maps, the northern portion of the property was historically occupied by a fuel dispensing station from 1932 through 1962. In February 2002, EnviroVision, Inc. drilled exploratory borings SB-1, SB-2 and SB-3 to a depth of 15 feet. The purpose of the drilling was to assess the potential impact to soil and groundwater from reported fuel dispensing activities at the Site. In letters dated May 20 and June 4, 2002, the GPP identified Woods Limited Partnership as the responsible party (RP). On August 28 and November 18, 2002, EnviroVision submitted their Work Plan for Additional Site Characterization and Groundwater Monitoring and addendum that was approved by the GPP in a letter dated December 30, 2002. On January 10, 2003, EnviroVision in collaboration with Norcal Geophysical Consultants, Inc. conducted a geophysical survey to both trace the lateral extent of subsurface vent and product lines using line-locating equipment and locate any abandoned USTs using ground penetrating radar. EnviroVision identified several subsurface anomalies largeenough to represent potential underground storage tanks located in the sidewalk of the Maple Street frontage. In March and April 2003, EnviroVision drilled one additional soil boring SB-4

COOKS AUTO BODY (Continued) **1000272042**

and installed three 2-inch groundwater monitor wells MW-1, MW-2 and MW-3. In May 2004, Golden Gate Tank Removal, Inc. (GGTR) excavated five shallow locations where the previous geophysical survey by EnviroVision had indicated potential underground storage tank (UST) locations. No USTs were discovered in the exploratory excavations. A metal product line was uncovered in excavation area A and one soil sample was recovered from beneath the product line at two feet below grade for laboratory analysis. In September 2004, GGTR traced the lateral extent of the subsurface product and vent lines by hand digging. GGTR collected soil samples PLA[2], PL2B[2], PL2C[2], PL2D[2], PL2D[3.5], PL3A[2], and PL3B[2] beneath the exposed product lines and subsequently removed exposed piping from the trenches. Approximately 70 feet of product pipe and 50 feet of vent pipe were removed from the property for disposal at the Circosta Iron & Metal Company. Excavated soil was returned to the product line trenches as backfill. GGTR drilled five (5) soil borings SB-5 through SB-9 to a depth of 20 feet at the property. Borings SB-7 and SB-9 were converted to respective 2-inch groundwater monitor wells MW-5 and MW-4. Three additional soil borings SB-PL2A, SB-PL2D, and SB-PL3B were drilled to 12 feet to assess the vertical extent of soil contamination beneath the former product lines. No abandoned USTs were located during the exploratory drilling. In February 2007, GGTR drilled exploratory boring SB-13 to approximately 28 fbg. Soil samples were collected continuously in the boring between 5 and 24 fbg. The boring encountered silty clay to a depth of 15 feet, silty sand from 15 to 20 feet, and sandy gravel from 20 to 28 feet. New slotted well casing was temporarily installed in boring SB-13 and a grab groundwater sample collected after 20 minutes of recharge at a depth of 8.2 feet. A series of four separate Hydropunch borings were then drilled northward of the SB-13 location to obtain grab groundwater samples at 15, 20, 27 and 35 feet below grade. In February 2007, GGTR submitted a traffic control plan to the City of Redwood City for temporary closure of the roadway and re-routing of vehicular traffic, and on March 29, 2007, GGTR drilled boring SB-12 to a depth of 27 fbg. Soil samples were collected continuously in the boring between 5 and 24 fbg. Boring SB-12 encountered silty clay to a depth of 15 feet, silty sand from 15 to 19 feet, and sandy gravel from 19 to 27 feet. Hydrocarbon odor was recognized in the 10 foot soil sample only. Two soil samples from depths of 10 and 15 feet were submitted for analysis of TPH as gasoline and BTEX. The boring was terminated in heaving sands that prevented sample recovery below 24 feet. New slotted well casing was temporarily installed in boring SB-12 and a grab groundwater sample collected after 15 minutes of recharge at a depth of 11.5 feet. A series of four separate Hydropunch borings were then drilled northward of the boring SB-12 location to obtain grab groundwater samples at 15, 20, and 27 feet below grade. In the 4th Hydropunch boring, no groundwater was recovered at the 35 foot target depth. New slotted well casing was temporarily installed in boring 4. However, no groundwater was recovered in the casing after 45 minutes and the sampling was abandoned due to time constraints for the temporary roadway closure. On February 27, 2007, GGTR drilled new monitor well MW-6 to approximately 20 fbg, using 8-inch diameter, continuous flight, hollow-stem augers. Monitoring well MW-6 was constructed of standard 2-inch diameter, flush-threaded, Schedule 40 Polyvinyl Chloride (PVC) factory slotted (0.010 inch) well screen (@ 5 to 20 fbg) and blank riser casing (@ 0.5 to 5 fbg). On March 14 and 30, 2007, GGTR

COOKS AUTO BODY (Continued) **1000272042**

continued thelateral and vertical delineation of the extent of soil contamination in the vicinity of former product/vent lines and the dispenser island. Handaugured borings were used to collect the soil samples at locations SB-11, SB-PL2A-E, SBPL2A- S, and SB-PL2D. Soil samples were collected from the borings for the laboratory analysis of lead, zinc, SVOCs, and TPH as Motor Oil. Due to difficult subsurface conditions, percussion drilling equipment was subsequently used to collect soil samples from borings SB-10, SBPL2A-NW, SB-PL2D-NW, and SB-PL2D-S. Boring SB-11 was proposed to a depth of five feet but encountered drilling refusal on concrete debris just below collection of the two foot soil sample. Between April 2003 and February 2004, EnviroVision conducted four consecutive quarterly monitoring and sampling events for the three onsite wells MW-1, MW-2, and MW-3. Additional details of each monitoring event are provided in respective reports issued by EnviroVision. Based on review of the EnviroVision March 2004 Groundwater Monitoring Report, the GPP in a letter dated May 17, 2004, requested that the quarterly monitoring and sampling frequency be reduced to semi-annual events (first and third quarters). Upon completing the installation of monitoring wells MW-4 and MW-5, GGTR conducted semiannual monitoring and sampling events for the five monitor wells between September 2004 and September 2006. GGTR in conjunction with Dysert Environmental, Inc., conducted semi-annual groundwater monitoring and sampling activities on March 27, 2007 for all six monitor wells at the Site. On March 14, 2007, Golden Gate Tank Removal, Inc. (GGTR) recovered five discrete soil samples using hand auger equipment from the former product/vent line removal trenches. The concrete surface was cored to allow hand-auger equipment to drill a 6-inch deep hole. Soil samples were recovered from a depth of 6-12 inches at each location using a slide hammer and brass sample liners. Between December 2007 and October 2008, Golden Gate Tank Removal, Inc. (GGTR) conducted semi-annual monitoring and sampling events for the six monitor wells. A gap in groundwater monitoring occurred from the end of 2008 through 2009. Semi-annual groundwater monitoring resumed at the Site during the first quarter of 2010, and was performed on January 27, 2010 by GGE. GGE submitted the Risk Assessment for Lead in Soil dated December 30, 2009, to address the residual lead-contaminated soil. The majority of the Site is characterized by lead concentrations within the range of expected background values for urban soils. Groundwater is not impacted by dissolved lead and the groundwater does not appear threatened by the residual lead. Two hotspots of lead contamination in soil exist above the residential ESL value of 200 mg/kg and one of the hotspots (at the building corner) exceeds the industrial ESL value of 750 mg/kg. The extent of lead contamination is not completely defined by existing soil sampling and the southern extent of lead in soil contamination beneath the building is not known. Three soil samples contain total lead concentrations above 1000 mg/kg (and elevated soluble lead) and could be considered a hazardous waste if excavated and transported offsite. As noted by the GPP in their April 23, 2008 letter, other areas of the Site with elevated lead concentrations above 100 mg/kg may also contain elevated soluble lead concentrations and upon excavation and profiling for offsite disposal, these soils could be classified as a California hazardous waste requiring special handling/disposal practices with significant increased cost. The Site is in commercial use as an automobile body repair shop and the area of lead impact is completely covered by asphalt/concrete. The current commercial land use at the Site is

COOKS AUTO BODY (Continued) **1000272042**

unlikely to present a complete pathway for the ingestion or inhalation of lead contaminated soil. The elevated concentrations of total lead in soil present a health hazard to children under future redevelopment scenarios involving sensitive land use such as residential, school, etc., where the contaminated soil may be exposed at the surface. Excavation and transport of the contaminated soil offsite to a sensitive land use would also present opportunities for exposure to children. Although no future redevelopment is planned at the Site by the current property owner, management of the lead contaminated soil appears necessary to prevent these potential future exposures, should there be a change in property ownership or redevelopment plans. GPP has indicated it will notify the Redwood City Building Department of the lead in soil condition to inhibit improper management and use of this soil from future re-development activities. GGE also recommended the owner implement a Soil Management Plan to track and manage the contaminated soil during future utility installation or other excavation activities.

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0608183982
Contact Type:	Local Agency Caseworker
Contact Name:	DENO MILANO
Organization Name:	SAN MATEO COUNTY LOP
Address:	2000 ALAMEDA DE LAS PULGAS
City:	SAN MATEO
Email:	dmilano@smcgov.org
Phone Number:	6503726292

Global Id:	T0608183982
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

Status History:

Global Id:	T0608183982
Status:	Completed - Case Closed
Status Date:	03/22/2013

Global Id:	T0608183982
Status:	Open - Case Begin Date
Status Date:	02/21/2001

Global Id:	T0608183982
Status:	Open - Site Assessment
Status Date:	02/21/2001

Global Id:	T0608183982
Status:	Open - Site Assessment
Status Date:	03/14/2005

Global Id:	T0608183982

COOKS AUTO BODY (Continued) **1000272042**

Status: Open - Verification Monitoring
Status Date: 10/27/2010

Regulatory Activities:

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 12/31/2003
Action: Staff Letter - #20031231

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 06/29/2006
Action: Staff Letter - #20060629

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 02/14/2013
Action: Staff Letter - #20130214

Global Id: T0608183982
Action Type: RESPONSE
Date: 08/15/2003
Action: Electronic Reporting Submittal Due

Global Id: T0608183982
Action Type: RESPONSE
Date: 06/15/2004
Action: Monitoring Report - Other

Global Id: T0608183982
Action Type: RESPONSE
Date: 11/15/2004
Action: Monitoring Report - Semi-Annually

Global Id: T0608183982
Action Type: RESPONSE
Date: 11/15/2008
Action: Monitoring Report - Semi-Annually

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 02/06/2003
Action: Staff Letter - #20030206

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 04/09/2003
Action: Staff Letter - #20030409

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 02/26/2004
Action: Staff Letter - #20040226

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 12/28/2005

COOKS AUTO BODY (Continued) **1000272042**

Action: Staff Letter - #20051228

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 08/15/2006
Action: Technical Correspondence / Assistance / Other - #20060815

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 04/23/2008
Action: Staff Letter - #20080423

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 12/14/2006
Action: Staff Letter - #20061214

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 05/20/2008
Action: Staff Letter - #20080520

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 09/11/2006
Action: Meeting

Global Id: T0608183982
Action Type: RESPONSE
Date: 12/31/2010
Action: Correspondence

Global Id: T0608183982
Action Type: RESPONSE
Date: 07/22/2002
Action: Soil and Water Investigation Workplan

Global Id: T0608183982
Action Type: RESPONSE
Date: 11/15/2003
Action: Monitoring Report - Quarterly

Global Id: T0608183982
Action Type: RESPONSE
Date: 02/15/2004
Action: Monitoring Report - Quarterly

Global Id: T0608183982
Action Type: RESPONSE
Date: 08/15/2003
Action: Soil and Water Investigation Report

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 01/22/2007
Action: Staff Letter - #20070122

COOKS AUTO BODY (Continued) **1000272042**

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 09/09/2003
Action: Staff Letter - #20030909

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 07/23/2003
Action: Staff Letter - #20030723

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 05/17/2004
Action: Staff Letter - #20040517A

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 12/13/2004
Action: Technical Correspondence / Assistance / Other - #20041213

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 12/30/2002
Action: Staff Letter - #20021230

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 07/09/2008
Action: Staff Letter - #20080709

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 05/20/2002
Action: Staff Letter - #20020520

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 10/27/2010
Action: Staff Letter - #20101027

Global Id: T0608183982
Action Type: RESPONSE
Date: 08/15/2003
Action: Monitoring Report - Quarterly

Global Id: T0608183982
Action Type: RESPONSE
Date: 02/15/2003
Action: Monitoring Report - Quarterly

Global Id: T0608183982
Action Type: RESPONSE
Date: 05/15/2003
Action: Monitoring Report - Quarterly

Global Id: T0608183982
Action Type: RESPONSE

COOKS AUTO BODY (Continued) **1000272042**

Date: 09/30/2003
Action: Soil and Water Investigation Workplan

Global Id: T0608183982
Action Type: RESPONSE
Date: 02/19/2004
Action: Soil and Water Investigation Workplan - Addendum

Global Id: T0608183982
Action Type: RESPONSE
Date: 05/16/2005
Action: Monitoring Report - Semi-Annually

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 05/31/2012
Action: PRP Search Report

Global Id: T0608183982
Action Type: RESPONSE
Date: 11/26/2002
Action: Soil and Water Investigation Workplan - Addendum

Global Id: T0608183982
Action Type: RESPONSE
Date: 05/26/2003
Action: Soil and Water Investigation Report

Global Id: T0608183982
Action Type: RESPONSE
Date: 01/31/2003
Action: Soil and Water Investigation Workplan - Addendum

Global Id: T0608183982
Action Type: Other
Date: 09/02/2002
Action: Leak Reported

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 06/05/2012
Action: Notice of Violation - #20120605

Global Id: T0608183982
Action Type: RESPONSE
Date: 05/15/2011
Action: Monitoring Report - Annually

Global Id: T0608183982
Action Type: RESPONSE
Date: 05/15/2012
Action: Monitoring Report - Annually

Global Id: T0608183982
Action Type: RESPONSE
Date: 10/31/2012
Action: Well Destruction Report

COOKS AUTO BODY (Continued) **1000272042**

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 10/24/2002
Action: Staff Letter - #20021024

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 07/17/2003
Action: Staff Letter - #20030717

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 03/14/2005
Action: Staff Letter - #20050314

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 06/05/2002
Action: Notice of Responsibility - #20020605

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 05/17/2004
Action: Staff Letter - #20040517B

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 01/31/2013
Action: Notice of Violation - #20130131

Global Id: T0608183982
Action Type: RESPONSE
Date: 05/15/2009
Action: Monitoring Report - Semi-Annually

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 08/05/2009
Action: Staff Letter - #20090805

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 05/25/2004
Action: Staff Letter - #20040525

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 10/07/2009
Action: Notice of Violation - #20091007

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 10/28/2009
Action: Technical Correspondence / Assistance / Other - #20091028

Global Id: T0608183982
Action Type: ENFORCEMENT

COOKS AUTO BODY (Continued) **1000272042**

Date: 03/01/2006
Action: Notice of Violation - #20060301

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 11/22/2006
Action: Technical Correspondence / Assistance / Other - #20061122

Global Id: T0608183982
Action Type: RESPONSE
Date: 05/15/2004
Action: Monitoring Report - Quarterly

Global Id: T0608183982
Action Type: RESPONSE
Date: 05/30/2002
Action: Unauthorized Release Form

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 07/24/2012
Action: Referral to Other State Agency - #20120724

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 03/22/2013
Action: Closure/No Further Action Letter - #20130322

Global Id: T0608183982
Action Type: RESPONSE
Date: 05/15/2010
Action: Monitoring Report - Semi-Annually

Global Id: T0608183982
Action Type: RESPONSE
Date: 05/27/2005
Action: Electronic Reporting Submittal Due

Global Id: T0608183982
Action Type: RESPONSE
Date: 06/09/2005
Action: Soil and Water Investigation Workplan

Global Id: T0608183982
Action Type: RESPONSE
Date: 01/18/2007
Action: Soil and Water Investigation Report

Global Id: T0608183982
Action Type: RESPONSE
Date: 10/02/2006
Action: Soil and Water Investigation Workplan - Addendum

Global Id: T0608183982
Action Type: RESPONSE
Date: 06/09/2008
Action: Other Report / Document

COOKS AUTO BODY (Continued) **1000272042**

Global Id: T0608183982
Action Type: RESPONSE
Date: 11/19/2008
Action: Risk Assessment Report

Global Id: T0608183982
Action Type: Other
Date: 02/21/2002
Action: Leak Discovery

Global Id: T0608183982
Action Type: ENFORCEMENT
Date: 07/19/2012
Action: Staff Letter - #20120719

Global Id: T0608183982
Action Type: RESPONSE
Date: 11/15/2009
Action: Monitoring Report - Semi-Annually

Global Id: T0608183982
Action Type: RESPONSE
Date: 11/19/2008
Action: Soil and Water Investigation Report

Global Id: T0608183982
Action Type: RESPONSE
Date: 09/13/2004
Action: Soil and Water Investigation Report

Global Id: T0608183982
Action Type: RESPONSE
Date: 11/15/2005
Action: Monitoring Report - Semi-Annually

Global Id: T0608183982
Action Type: RESPONSE
Date: 05/15/2006
Action: Monitoring Report - Semi-Annually

Global Id: T0608183982
Action Type: RESPONSE
Date: 05/15/2007
Action: Monitoring Report - Semi-Annually

Global Id: T0608183982
Action Type: RESPONSE
Date: 05/15/2008
Action: Monitoring Report - Semi-Annually

Global Id: T0608183982
Action Type: RESPONSE
Date: 11/15/2006
Action: Monitoring Report - Semi-Annually

Global Id: T0608183982
Action Type: RESPONSE

COOKS AUTO BODY (Continued) **1000272042**

Date: 11/15/2007
Action: Monitoring Report - Semi-Annually

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Preliminary site assessment underway
Case Number: 330188
How Discovered: SA
Leak Cause: Unknown
Leak Source: Unknown
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: 2/21/2001
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

SAN MATEO CO. LUST:
Region: SAN MATEO
Facility ID: 330188
Facility Status: 9- Case Closed
Global ID: T0608183982
APN Number: 053138010
Case Type: SAN MATEO CO. LUST
EDR Link ID: SAN MATEO CO. LUST

FINDS:

Registry ID: 110001168888

Environmental Interest/Information System

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZARDOUS AIR POLLUTANT MAJOR

STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

COOKS AUTO BODY (Continued) **1000272042**

ECHO:
Envid: 1000272042
Registry ID: 110001168888
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110001168888

17
West
1/2-1
0.996 mi.
5260 ft.

Relative:
Higher

Actual:
173 ft.

OAK KNOLL STATION **Notify 65** **U000059129**
590 CANYON ROAD **N/A**
REDWOOD CITY, CA 92257

NOTIFY 65:
Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Issue Date: Not reported
Incident Description: Not reported

Count: 2 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
REDWOOD CITY	S109149555	SEQUOIA ALTERNATIVE SCHOOL	435, 455, 461 5TH AVENUE AND 4	94063	ENVIROSTOR, SCH
REDWOOD CITY	S105954452	SEQUOIA STATION SHOPPING CENTER	INTERSECTION OF EL CAMINO REAL	94063	ENVIROSTOR

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/05/2017
Date Data Arrived at EDR: 04/21/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 21

Source: EPA
Telephone: N/A
Last EDR Contact: 04/21/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 04/05/2017
Date Data Arrived at EDR: 04/21/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 21

Source: EPA
Telephone: N/A
Last EDR Contact: 04/21/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/05/2017
Date Data Arrived at EDR: 04/21/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 21

Source: EPA
Telephone: N/A
Last EDR Contact: 04/21/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/07/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 92

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 04/07/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 02/07/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 16

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/21/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 02/07/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 16

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/25/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/28/2016
Date Data Arrived at EDR: 01/04/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 93

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 05/15/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 11/15/2016
Date Data Arrived at EDR: 11/29/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 66

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/31/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 11/15/2016
Date Data Arrived at EDR: 11/29/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 66

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/31/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/26/2016
Date Data Arrived at EDR: 09/29/2016
Date Made Active in Reports: 11/11/2016
Number of Days to Update: 43

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 03/29/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Annually

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 01/30/2017
Date Data Arrived at EDR: 01/31/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 112

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 01/30/2017
Date Data Arrived at EDR: 01/31/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 112

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 02/13/2017
Date Data Arrived at EDR: 02/15/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 76

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 05/17/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)
Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/13/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 49
Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 03/14/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Quarterly

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22
Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35
Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14
Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List
Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30
Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29
Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Varies

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/14/2016
Date Data Arrived at EDR: 01/27/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 98

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Semi-Annually

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/07/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Quarterly

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/06/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Quarterly

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 10/01/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/17/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 09/01/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

SLIC: Statewide SLIC Cases (GEOTRACKER)
Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/13/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 49
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/14/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35
Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36
Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11
Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17
Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Annually

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55
Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 04/11/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Varies

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 03/12/2017
Date Data Arrived at EDR: 03/16/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 57
Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 03/16/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69
Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 03/24/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Quarterly

INDIAN UST R5: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 01/14/2017
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 10/01/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Semi-Annually

INDIAN UST R7: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/01/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/17/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 10/06/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Quarterly

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 10/14/2016
Date Data Arrived at EDR: 01/27/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 98

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Semi-Annually

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 10/07/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Quarterly

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 03/27/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 01/30/2017
Date Data Arrived at EDR: 01/31/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 112

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Quarterly

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 01/03/2017
Date Data Arrived at EDR: 01/04/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 57
Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 03/29/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 03/02/2017
Date Data Arrived at EDR: 03/02/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 36
Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/02/2017
Next Scheduled EDR Contact: 07/03/2017
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database
Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30
Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 03/13/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 50
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/14/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 01/13/2017
Date Data Arrived at EDR: 01/17/2017
Date Made Active in Reports: 05/31/2017
Number of Days to Update: 134
Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 05/15/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52
Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 05/01/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Varies

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39
Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137
Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176
Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 09/30/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 36
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/28/2017
Next Scheduled EDR Contact: 06/12/2017
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database
The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 01/30/2017
Date Data Arrived at EDR: 01/31/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 112

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 03/17/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 54

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 04/10/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/30/2016
Date Data Arrived at EDR: 12/05/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 67

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/31/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 03/09/2017
Date Data Arrived at EDR: 03/17/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 67

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database
The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CA FID UST: Facility Inventory Database
The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing
A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 03/06/2017
Date Data Arrived at EDR: 03/07/2017
Date Made Active in Reports: 04/21/2017
Number of Days to Update: 45

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014
Date Data Arrived at EDR: 03/18/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 37

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 04/21/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 03/06/2017
Date Data Arrived at EDR: 03/07/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 77

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 03/07/2017
Next Scheduled EDR Contact: 06/19/2017
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/28/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 37

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 03/29/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Annually

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/06/2016
Date Data Arrived at EDR: 01/25/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 105

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/13/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 49

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/14/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/13/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 49

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/14/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Varies

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015
Date Data Arrived at EDR: 07/08/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 02/24/2017
Next Scheduled EDR Contact: 06/05/2017
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/14/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/14/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63
Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/19/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 02/13/2017
Date Data Arrived at EDR: 02/15/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 86
Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 05/17/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88
Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 05/08/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6
Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/15/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 14
Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/24/2017
Next Scheduled EDR Contact: 07/03/2017
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 11/24/2015
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 133

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 05/26/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/26/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 74

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 03/06/2017
Next Scheduled EDR Contact: 06/19/2017
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 02/01/2017
Date Data Arrived at EDR: 02/09/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/21/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 10/17/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 3
Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 05/09/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 01/20/2016
Date Data Arrived at EDR: 04/28/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 127
Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/10/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 04/10/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 05/19/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 05/19/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016
Date Data Arrived at EDR: 09/08/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 43
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 05/08/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 03/06/2017
Next Scheduled EDR Contact: 06/19/2017
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 03/06/2017
Next Scheduled EDR Contact: 06/19/2017
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 04/28/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 01/04/2017
Date Data Arrived at EDR: 01/06/2017
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 35
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 04/06/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 05/02/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 09/30/2016
Date Data Arrived at EDR: 11/18/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 77

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 03/27/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 02/24/2015
Date Made Active in Reports: 09/30/2015
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 05/26/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/14/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 12/23/2016
Date Data Arrived at EDR: 12/27/2016
Date Made Active in Reports: 02/17/2017
Number of Days to Update: 52

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 12/05/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 04/21/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 03/07/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 03/07/2017
Next Scheduled EDR Contact: 04/10/2017
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/08/2017
Date Data Arrived at EDR: 02/28/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 38

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 05/31/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/31/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 03/14/2017
Date Data Arrived at EDR: 03/17/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 21

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 03/13/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 04/04/2017
Date Data Arrived at EDR: 04/07/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 35

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 04/07/2017
Next Scheduled EDR Contact: 06/19/2017
Data Release Frequency: Quarterly

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 03/19/2017
Date Data Arrived at EDR: 03/21/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 03/21/2017
Next Scheduled EDR Contact: 07/03/2017
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 10/25/2015
Date Data Arrived at EDR: 01/29/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 67

Source: Department of Defense
Telephone: 571-373-0407
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

DOCKET HWC: Hazardous Waste Compliance Docket Listing
A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 06/02/2016
Date Data Arrived at EDR: 06/03/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 91
Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing
This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/22/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 79
Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan
Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6
Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 12/28/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 64
Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 03/29/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Quarterly

DRYCLEANERS: Cleaner Facilities
A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 03/09/2017
Date Data Arrived at EDR: 04/11/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 42
Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Annually

EMI: Emissions Inventory Data
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 09/23/2016
Date Made Active in Reports: 10/24/2016
Number of Days to Update: 31
Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 03/21/2017
Next Scheduled EDR Contact: 07/03/2017
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 01/23/2017
Date Data Arrived at EDR: 01/27/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 118

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 04/25/2016
Date Data Arrived at EDR: 04/29/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 53

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 02/14/2017
Date Data Arrived at EDR: 02/17/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 97

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 05/15/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 10/12/2016
Date Made Active in Reports: 12/15/2016
Number of Days to Update: 64

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 04/14/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 11/21/2016
Date Data Arrived at EDR: 11/22/2016
Date Made Active in Reports: 01/23/2017
Number of Days to Update: 62

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing
Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 11/21/2016
Date Data Arrived at EDR: 11/22/2016
Date Made Active in Reports: 01/23/2017
Number of Days to Update: 62
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database
A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 04/11/2017
Date Data Arrived at EDR: 04/13/2017
Date Made Active in Reports: 04/26/2017
Number of Days to Update: 13
Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 04/13/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing
A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 09/12/2016
Date Data Arrived at EDR: 09/14/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 30
Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 03/13/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Varies

MWMP: Medical Waste Management Program Listing
The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 12/02/2016
Date Data Arrived at EDR: 12/06/2016
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 86
Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 03/07/2017
Next Scheduled EDR Contact: 06/19/2017
Data Release Frequency: Varies

NPDES: NPDES Permits Listing
A listing of NPDES permits, including stormwater.

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 11/15/2016
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 107
Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 05/17/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing
A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 12/06/2016
Date Data Arrived at EDR: 12/06/2016
Date Made Active in Reports: 03/03/2017
Number of Days to Update: 87
Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 03/07/2017
Next Scheduled EDR Contact: 06/19/2017
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 03/13/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 50
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/14/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 12/16/2016
Date Data Arrived at EDR: 12/22/2016
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 70
Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 04/03/2017
Next Scheduled EDR Contact: 07/03/2017
Data Release Frequency: No Update Planned

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 01/20/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 50
Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 03/14/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water board?s review found that more than one-third of the region?s active disposal pits are operating without permission.

Date of Government Version: 04/15/2015
Date Data Arrived at EDR: 04/17/2015
Date Made Active in Reports: 06/23/2015
Number of Days to Update: 67
Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 04/14/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9
Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Quarterly

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13
Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 03/24/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 04/10/2017
Date Data Arrived at EDR: 04/11/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 31

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 04/10/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Semi-Annually

Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 04/10/2017
Date Data Arrived at EDR: 04/11/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 21

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 04/10/2017
Next Scheduled EDR Contact: 04/24/2047
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA Facility List

Cupa Facility List

Date of Government Version: 03/06/2017
Date Data Arrived at EDR: 03/08/2017
Date Made Active in Reports: 04/14/2017
Number of Days to Update: 37

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA Facility Listing

Cupa facility list.

Date of Government Version: 01/31/2017
Date Data Arrived at EDR: 02/07/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 94

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 04/10/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 03/27/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 02/23/2017
Date Data Arrived at EDR: 02/24/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 77

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Varies

CONTRA COSTA COUNTY:

Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 11/17/2016
Date Data Arrived at EDR: 11/22/2016
Date Made Active in Reports: 01/26/2017
Number of Days to Update: 65

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 05/01/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA Facility List
Cupa Facility list

Date of Government Version: 01/31/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/14/2017
Number of Days to Update: 70

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 05/01/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 02/24/2017
Date Data Arrived at EDR: 02/28/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 73

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 05/01/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 04/06/2017
Date Data Arrived at EDR: 04/07/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 40

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 03/31/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 12/02/2016
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 111

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

HUMBOLDT COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 03/20/2017
Date Data Arrived at EDR: 03/21/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 57

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

IMPERIAL COUNTY:

CUPA Facility List

Cupa facility list.

Date of Government Version: 01/23/2017
Date Data Arrived at EDR: 01/25/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 36

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

INYO COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 03/09/2017
Date Data Arrived at EDR: 03/09/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 77

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 02/07/2017
Date Data Arrived at EDR: 02/10/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 81

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 03/06/2017
Date Data Arrived at EDR: 03/07/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 71

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

LAKE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 01/18/2017
Date Data Arrived at EDR: 01/20/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 41

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 04/17/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 11/30/2016
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 111

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 11/30/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206
Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 03/20/2017
Next Scheduled EDR Contact: 07/03/2017
Data Release Frequency: No Update Planned

HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 11/18/2016
Date Made Active in Reports: 01/23/2017
Number of Days to Update: 66
Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 04/10/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 04/17/2017
Date Data Arrived at EDR: 04/18/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 14
Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 04/18/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Varies

City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2016
Date Data Arrived at EDR: 01/26/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 56
Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 04/17/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Varies

Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 03/29/2016
Date Data Arrived at EDR: 04/06/2016
Date Made Active in Reports: 06/13/2016
Number of Days to Update: 68
Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 04/17/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/17/2017
Date Data Arrived at EDR: 01/18/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 112
Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 04/17/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/09/2017
Date Data Arrived at EDR: 03/10/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 54
Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Annually

City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 01/10/2017
Date Data Arrived at EDR: 01/13/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 110

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 04/10/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 03/03/2017
Date Data Arrived at EDR: 03/07/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 71

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

MARIN COUNTY:

Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 03/31/2017
Date Data Arrived at EDR: 04/06/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 27

Source: Public Works Department Waste Management
Telephone: 415-499-6647
Last EDR Contact: 03/31/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 02/22/2017
Date Data Arrived at EDR: 02/23/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 83

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

MONO COUNTY:

CUPA Facility List
CUPA Facility List

Date of Government Version: 02/21/2017
Date Data Arrived at EDR: 03/02/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 76

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Varies

MONTEREY COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 06/24/2016
Date Data Arrived at EDR: 06/27/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 43

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

NAPA COUNTY:

Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 03/15/2017
Date Data Arrived at EDR: 03/16/2017
Date Made Active in Reports: 05/09/2017
Number of Days to Update: 54

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 02/09/2017
Date Data Arrived at EDR: 02/10/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 96

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 05/01/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 02/06/2017
Date Data Arrived at EDR: 02/10/2017
Date Made Active in Reports: 04/21/2017
Number of Days to Update: 70

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/08/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 11/04/2016
Date Data Arrived at EDR: 11/11/2016
Date Made Active in Reports: 01/23/2017
Number of Days to Update: 73

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/08/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 02/06/2017
Date Data Arrived at EDR: 02/07/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 85
Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/09/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 09/02/2016
Date Data Arrived at EDR: 09/06/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 38
Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 01/31/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 111
Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 04/18/2017
Date Data Arrived at EDR: 04/20/2017
Date Made Active in Reports: 04/21/2017
Number of Days to Update: 1
Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/20/2017
Next Scheduled EDR Contact: 07/03/2017
Data Release Frequency: Quarterly

Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 01/19/2017
Date Data Arrived at EDR: 01/25/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 98
Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/20/2017
Next Scheduled EDR Contact: 07/03/2017
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 11/07/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 56

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/04/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Quarterly

Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 11/08/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 56

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/04/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 11/30/2016
Date Data Arrived at EDR: 02/09/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 105

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 12/09/2016
Date Data Arrived at EDR: 12/13/2016
Date Made Active in Reports: 03/03/2017
Number of Days to Update: 80

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 05/08/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 10/05/2016
Date Data Arrived at EDR: 12/06/2016
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 86

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 03/10/2017
Next Scheduled EDR Contact: 06/19/2017
Data Release Frequency: Quarterly

Solid Waste Facilities
San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2015
Date Data Arrived at EDR: 11/07/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 58
Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

Environmental Case Listing
The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24
Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 03/06/2017
Next Scheduled EDR Contact: 06/19/2017
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

Local Oversite Facilities
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10
Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Quarterly

Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 02/28/2017
Date Data Arrived at EDR: 03/02/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 62
Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 03/21/2017
Date Data Arrived at EDR: 03/23/2017
Date Made Active in Reports: 05/09/2017
Number of Days to Update: 47
Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 03/20/2017
Next Scheduled EDR Contact: 07/03/2017
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 02/21/2017
Date Data Arrived at EDR: 02/21/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 91
Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

SAN MATEO COUNTY:

Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 03/15/2017
Date Data Arrived at EDR: 04/07/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 33
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/09/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Annually

Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/15/2017
Date Data Arrived at EDR: 04/07/2017
Date Made Active in Reports: 04/21/2017
Number of Days to Update: 14
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/27/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28
Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

SANTA CLARA COUNTY:

Cupa Facility List
Cupa facility list

Date of Government Version: 02/22/2017
Date Data Arrived at EDR: 02/23/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 89
Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22
Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13
Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Annually

Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/07/2016
Date Data Arrived at EDR: 11/10/2016
Date Made Active in Reports: 01/24/2017
Number of Days to Update: 75

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 03/14/2017
Date Data Arrived at EDR: 03/17/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 67

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

SOLANO COUNTY:

Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 11/29/2016
Date Data Arrived at EDR: 12/21/2016
Date Made Active in Reports: 12/22/2016
Number of Days to Update: 1

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 03/09/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Quarterly

Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 03/15/2017
Date Data Arrived at EDR: 03/17/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 47

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 03/09/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Quarterly

SONOMA COUNTY:

Cupa Facility List
Cupa Facility list

Date of Government Version: 03/01/2017
Date Data Arrived at EDR: 03/30/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 54

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 03/27/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Varies

Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 01/04/2017
Date Data Arrived at EDR: 01/06/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 55

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 03/27/2017
Next Scheduled EDR Contact: 07/10/2017
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 01/20/2017
Date Data Arrived at EDR: 01/24/2017
Date Made Active in Reports: 05/18/2017
Number of Days to Update: 114

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 11/30/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Varies

SUTTER COUNTY:

Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 12/02/2016
Date Data Arrived at EDR: 12/06/2016
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 35

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA Facility List

Cupa facilities

Date of Government Version: 01/05/2017
Date Data Arrived at EDR: 02/10/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 104

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 05/05/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 01/23/2017
Date Data Arrived at EDR: 01/25/2017
Date Made Active in Reports: 05/18/2017
Number of Days to Update: 113

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

TULARE COUNTY:

CUPA Facility List
Cupa program facilities

Date of Government Version: 01/05/2017
Date Data Arrived at EDR: 02/10/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 104

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 08/21/2017
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 01/25/2017
Date Data Arrived at EDR: 01/27/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 34

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Varies

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 12/27/2016
Date Data Arrived at EDR: 01/27/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 103

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/31/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 05/15/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Quarterly

Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 09/26/2016
Date Data Arrived at EDR: 10/27/2016
Date Made Active in Reports: 01/24/2017
Number of Days to Update: 89

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 04/24/2017
Next Scheduled EDR Contact: 08/07/2017
Data Release Frequency: Quarterly

Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 02/27/2017
Date Data Arrived at EDR: 03/15/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 49
Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/15/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 03/31/2017
Date Data Arrived at EDR: 04/06/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 27
Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 03/31/2017
Next Scheduled EDR Contact: 07/17/2017
Data Release Frequency: Annually

YUBA COUNTY:

CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 01/30/2017
Date Data Arrived at EDR: 01/31/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 112
Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 05/01/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45
Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/15/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 09/29/2016
Date Made Active in Reports: 01/03/2017
Number of Days to Update: 96
Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/11/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/30/2017
Date Data Arrived at EDR: 02/01/2017
Date Made Active in Reports: 02/13/2017
Number of Days to Update: 12

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 05/03/2017
Next Scheduled EDR Contact: 08/14/2017
Data Release Frequency: Annually

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 07/22/2016
Date Made Active in Reports: 11/22/2016
Number of Days to Update: 123

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/18/2017
Next Scheduled EDR Contact: 07/31/2017
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 06/19/2015
Date Made Active in Reports: 07/15/2015
Number of Days to Update: 26

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 04/14/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 50

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/13/2017
Next Scheduled EDR Contact: 06/26/2017
Data Release Frequency: Annually

Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data

Source: PennWell Corporation

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.
Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.
Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.
Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish & Game
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

JOHN GILL ELEMENTARY SCHOOL
555 AVENUE DEL ORA
REDWOOD CITY, CA 94062

TARGET PROPERTY COORDINATES

Latitude (North):	37.47439 - 37° 28' 27.80''
Longitude (West):	122.240558 - 122° 14' 26.01''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	567152.2
UTM Y (Meters):	4147566.5
Elevation:	59 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5640620 PALO ALTO, CA
Version Date:	2012
Southwest Map:	5640628 WOODSIDE, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

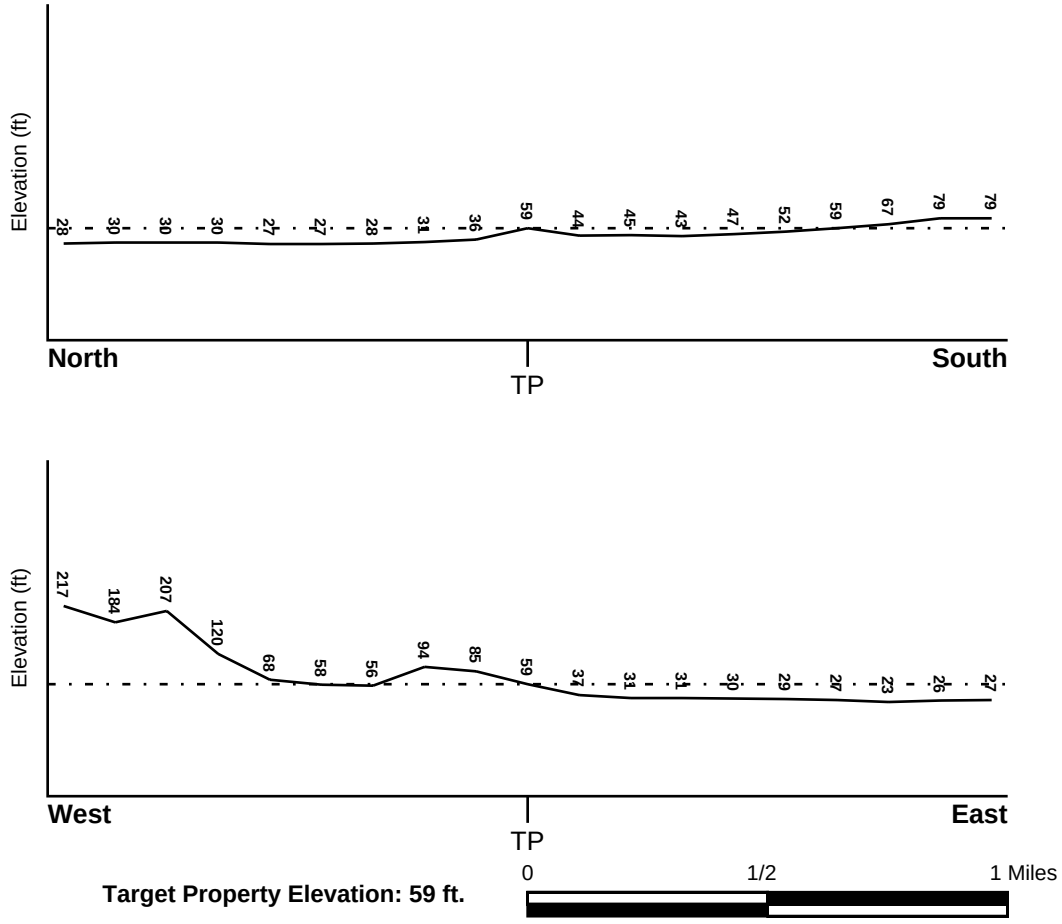
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General ENE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Target Property Elevation: 59 ft.

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06081C0301E	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06081C0282E	FEMA FIRM Flood data
06081C0285E	FEMA FIRM Flood data
06081C0303E	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
PALO ALTO	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
A1	1/4 - 1/2 Mile NNE	NNE
A2	1/2 - 1 Mile NNE	E
B3	1/2 - 1 Mile SE	NE
B4	1/2 - 1 Mile SE	N
5	1/2 - 1 Mile WNW	NE
C6	1/2 - 1 Mile NE	NE

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
D7	1/2 - 1 Mile NE	NNE
C8	1/2 - 1 Mile NE	NE
C9	1/2 - 1 Mile NE	N
D10	1/2 - 1 Mile NE	NE
11	1/2 - 1 Mile ENE	N
E12	1/2 - 1 Mile NE	N
13	1/2 - 1 Mile NNE	SE
14	1/2 - 1 Mile NNW	Not Reported
F15	1/2 - 1 Mile ENE	Not Reported
F16	1/2 - 1 Mile ENE	Not Reported
F17	1/2 - 1 Mile ENE	NE
F18	1/2 - 1 Mile ENE	NNE
E19	1/2 - 1 Mile NE	NE
E20	1/2 - 1 Mile NE	NE
G21	1/2 - 1 Mile NNE	E
G22	1/2 - 1 Mile NNE	NE
H23	1/2 - 1 Mile NE	NW
H24	1/2 - 1 Mile NE	NE
25	1/2 - 1 Mile NE	NE
27	1/2 - 1 Mile North	Varies

For additional site information, refer to Physical Setting Source Map Findings.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

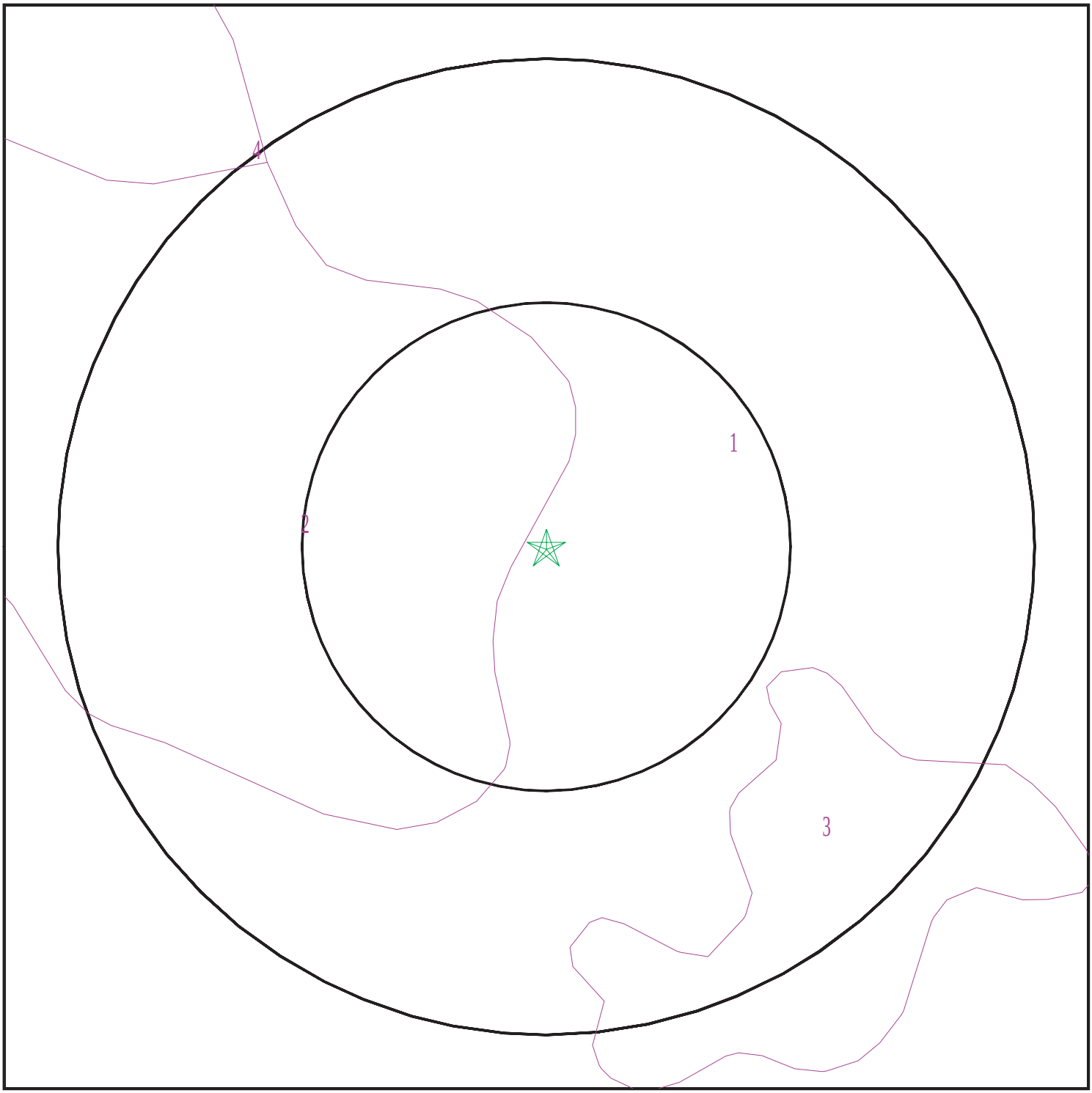
Era:	Paleozoic
System:	Permian
Series:	Ultramafic rocks
Code:	uM *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Plutonic and Intrusive Rocks

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4955887.16s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	John Gill Elementary School	CLIENT:	McCloskey Consultants Inc
ADDRESS:	555 Avenue Del Ora Redwood City CA 94062	CONTACT:	Tom Mccloskey
		INQUIRY #:	4955887.16s
LAT/LONG:	37.47439 / 122.240558	DATE:	June 05, 2017 10:14 am

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Urban land

Soil Surface Texture:
Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class:
Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches		Not reported	Not reported	Max: 0.01 Min: 0	Max: Min:

Soil Map ID: 2

Soil Component Name: Orthents

Soil Surface Texture:
Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	59 inches		Not reported	Not reported	Max: Min:	Max: Min:

Soil Map ID: 3

Soil Component Name: Orthents

Soil Surface Texture: variable

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	59 inches	variable	Not reported	Not reported	Max: Min:	Max: Min:

Soil Map ID: 4

Soil Component Name: Orthents

Soil Surface Texture:

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	59 inches		Not reported	Not reported	Max: Min:	Max: Min:

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 0.001 miles
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

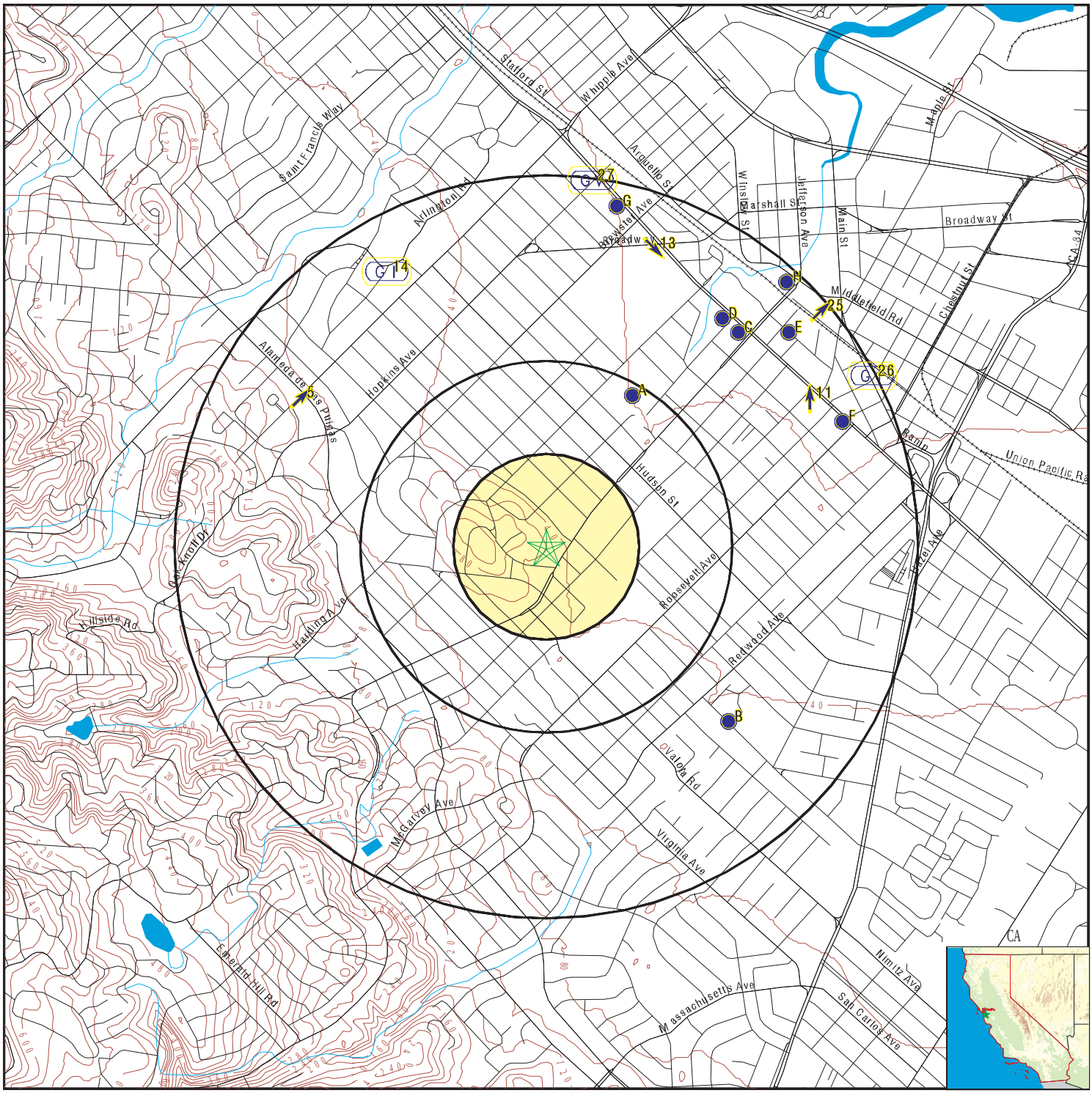
MAP ID	WELL ID	LOCATION FROM TP

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

PHYSICAL SETTING SOURCE MAP - 4955887.16s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME: John Gill Elementary School ADDRESS: 555 Avenue Del Ora Redwood City CA 94062 LAT/LONG: 37.47439 / 122.240558	CLIENT: McCloskey Consultants Inc CONTACT: Tom Mccloskey INQUIRY #: 4955887.16s DATE: June 05, 2017 10:14 am

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
A1 **NNE** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0441 NNE 4.70’ 8.90 Not Reported 03/01/1996	**AQUIFLOW**	**67069**
A2 **NNE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0478 E 1’ 3.5 Not Reported 10/30/1985	**AQUIFLOW**	**67049**
B3 **SE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0521 NE 19.5 24.0 Not Reported 06/05/1992	**AQUIFLOW**	**65874**
B4 **SE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	330024 N 13 15 Not Reported 03/11/1987	**AQUIFLOW**	**66746**
5 **WNW** **1/2 - 1 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0738 NE Not Reported Not Reported 16a 04/20/1993	**AQUIFLOW**	**65501**
C6 **NE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0839 NE 11 14 Not Reported 09/25/1996	**AQUIFLOW**	**65739**
D7 **NE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	330161 NNE 8’ 10’ Not Reported 02/04/1997	**AQUIFLOW**	**66559**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
C8 **NE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	330101 NE 7.37 9.45 Not Reported 06/1995	**AQUIFLOW**	**66727**
C9 **NE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0457 N 8.39 9.85 Not Reported 06/17/1994	**AQUIFLOW**	**66731**
D10 **NE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0185 NE 5.92 8.70 Not Reported 06/29/1992	**AQUIFLOW**	**66135**
11 **ENE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	330059 N Not Reported Not Reported 9.5 09/16/1988	**AQUIFLOW**	**66761**
E12 **NE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0393 N Not Reported Not Reported 11.30 06/19/1992	**AQUIFLOW**	**66566**
13 **NNE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0616 SE 7.00 8.70 Not Reported 05/20/1992	**AQUIFLOW**	**67077**
14 **NNW** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0362 Not Reported 21.5 29 Not Reported 06/01/1994	**AQUIFLOW**	**67086**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
F15 **ENE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	330023 Not Reported Not Reported Not Reported 7.22' 05/22/1990	**AQUIFLOW**	**66585**
F16 **ENE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	330023 Not Reported Not Reported Not Reported 7.22' 05/22/1990	**AQUIFLOW**	**66582**
F17 **ENE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0833 NE 8 9 Not Reported 05/17/1999	**AQUIFLOW**	**65591**
F18 **ENE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0724 NNE Not Reported Not Reported 7.8 a 05/1992	**AQUIFLOW**	**67018**
E19 **NE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	330082 NE 5.87 12 Not Reported 07/07/1997	**AQUIFLOW**	**65732**
E20 **NE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0707 NE 5.87 12 Not Reported 07/07/1997	**AQUIFLOW**	**65733**
G21 **NNE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0341 E 8.85 Not Reported 8.85 03/23/1991	**AQUIFLOW**	**67066**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
G22 **NNE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0454 NE 9.6 10.58 Not Reported 12/22/1992	**AQUIFLOW**	**67073**
H23 **NE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	330135 NW 6.52 7.33 Not Reported 12/1996	**AQUIFLOW**	**66052**
H24 **NE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	330152 NE Not Reported Not Reported 9.5 11/09/1998	**AQUIFLOW**	**67090**
25 **NE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0994 NE Not Reported Not Reported 10a 11/1996	**AQUIFLOW**	**65717**
26 **ENE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0920 Not Reported Not Reported Not Reported 10'a 03/31/1994	**AQUIFLOW**	**66743**
27 **North** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	41-0407 Varies 8.5 12.3 Not Reported 08/1990	**AQUIFLOW**	**65983**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
94062	119	27

Federal EPA Radon Zone for SAN MATEO County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 94062

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	2.000 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish & Game
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779
Oil and Gas well locations in the state.

RADON

State Database: CA Radon
Source: Department of Health Services
Telephone: 916-324-2208
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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Appendix B

Historical Aerial Photographs and Other Documents

John Gill Elementary School
555 Avenue Del Ora
Redwood City, CA 94062

Inquiry Number: 4955887.19
June 05, 2017

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

06/05/17

Site Name:

John Gill Elementary School
555 Avenue Del Ora
Redwood City, CA 94062
EDR Inquiry # 4955887.19

Client Name:

McCloskey Consultants Inc
420 Sycamore Valley Road West
Danville, CA 94526
Contact: Tom Mccloskey

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	Scale	Details	Source
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2010	1"=500'	Flight Year: 2010	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2005	1"=500'	Flight Year: 2005	USDA/NAIP
1998	1"=500'	Flight Date: August 27, 1998	USDA
1991	1"=500'	Acquisition Date: October 30, 1991	USGS/DOQQ
1982	1"=500'	Flight Date: July 05, 1982	USDA
1974	1"=500'	Flight Date: June 26, 1974	USGS
1968	1"=500'	Flight Date: June 14, 1968	USGS
1963	1"=500'	Flight Date: June 24, 1963	USGS
1958	1"=500'	Flight Date: July 25, 1958	USGS
1956	1"=500'	Flight Date: September 08, 1956	USGS
1948	1"=500'	Flight Date: September 26, 1948	USDA
1943	1"=500'	Flight Date: October 05, 1943	USDA

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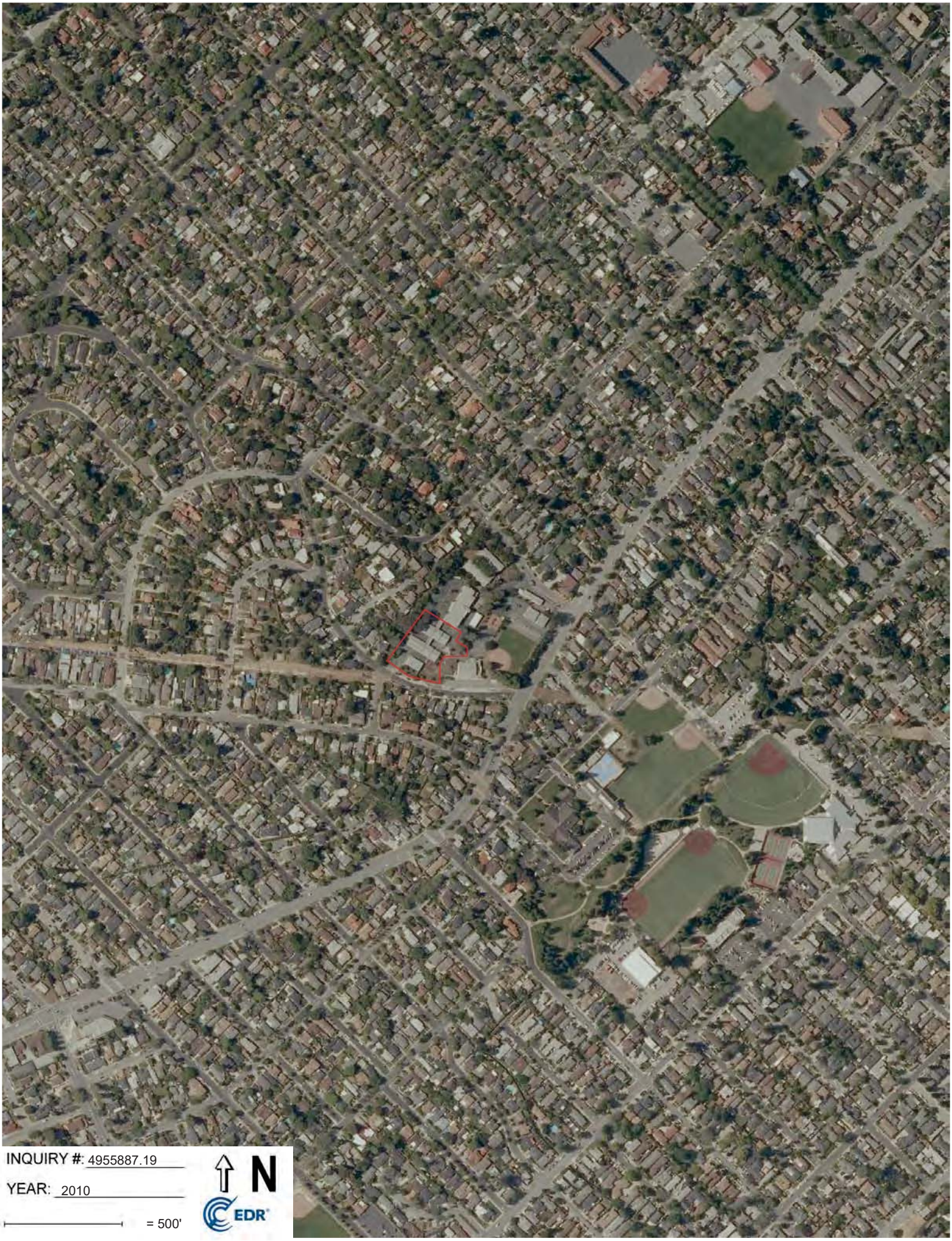
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INQUIRY #: 4955887.19
YEAR: 2012
= 500'
N
EDR


INQUIRY #: 4955887.19
YEAR: 2010
= 500'
N
EDR


INQUIRY #: 4955887.19
YEAR: 2009
= 500'
N
EDR


INQUIRY #: 4955887.19
YEAR: 2005
= 500'
N
EDR


INQUIRY #: 4955887.19
YEAR: 1998
= 500'
N
EDR


INQUIRY #: 4955887.19
YEAR: 1991
= 500'
N
EDR


INQUIRY #: 4955887.19
YEAR: 1982
= 500'
N
EDR


INQUIRY #: 4955887.19
YEAR: 1974
= 500'
N
EDR


INQUIRY #: 4955887.19
YEAR: 1968
= 500'
N
EDR


INQUIRY #: 4955887.19
YEAR: 1963
= 500'
N
EDR


INQUIRY #: 4955887.19
YEAR: 1958
= 500'
N
EDR



INQUIRY #: 4955887.19

YEAR: 1956

= 500'

N

EDR


INQUIRY #: 4955887.19
YEAR: 1948
= 500'
N
EDR


INQUIRY #: 4955887.19
YEAR: 1943
= 500'
N
EDR

Appendix C

Field Work Notice Example

TO BE PLACED ON DISTRICT LETTERHEAD

DATE: **April 5, 2018**

TO: **Neighbors of John Gill Elementary School**
located at 555 Avenue del Ora, Redwood City, California

FROM: **Redwood City School District**
750 Bradford Street
Redwood City, California 94063

RE: **Preliminary Environmental Assessment**
John Gill Elementary School
(DTSC Project Code 204295)

We would like to provide you with advance notice of an environmental assessment program that will be conducted at John Gill Elementary School, located at 555 Avenue del Ora, in Redwood City, San Mateo County, California. This environmental assessment project is related to a planned partial demolition and replacement of existing school buildings. The environmental assessment activity will be performed by a licensed contractor under the oversight of the California Environmental Protection Agency, Department of Toxic Substances Control (DTSC). Although an assessment will be conducted, this does not mean hazardous substances are located on this property. State laws require that all proposed new and expanding school sites undergo a complete environmental review, and if necessary, a cleanup to protect students, faculty and staff who will occupy the school.

Field work is scheduled to occur during the week of April 9, 2018. Sampling activities will start on April 11, 2018 and are anticipated to require 2 days to complete. All field work will be conducted during normal business hours, and street closures will not be required during the investigation.

The District will make the results of this investigation available to the public and DTSC in a document titled Preliminary Environmental Assessment Report (PEA). The PEA will include an assessment of whether hazardous materials are present and, if so, whether the materials are present in concentrations that would require some type of cleanup before constructing on the Site. The District will hold a 30-day public review and comment period on the draft PEA. Additionally, the District will hold a public hearing to discuss the investigation results and receive comments from the public. All comments received in this process shall be forwarded to DTSC for consideration.

The draft PEA will be made available for review at two District repositories. Notice of the start of the 30-day review period, date of public hearing, and location of repositories will be published in a local paper of general circulation. When the public participation process is complete, DTSC will issue a final determination with regard to the PEA.

If you have any questions concerning the upcoming soil assessment activities or other activities at the proposed school Site noted above, please contact Will Robertson, Measure T Bond Program Manager at (408) 314-8851 or Mellan Songco, DTSC Project Manager at (916) 255-6527.

Appendix D

Health and Safety Plan

SITE HEALTH AND SAFETY PLAN FOR SAMPLING

Project Name: John Gill School **Project Number:** _____ **Date:** 1/22/18

Anyone who enters a hazardous waste site must recognize and understand the potential hazards to health and safety associated with the cleanup/investigation of that site. Personnel actively involved in the field project must he thoroughly familiar with program and procedures contained in this SSP. This SSP must be available on-site when performing fieldwork. Periodic inspections may be made to evaluate if proper safety measures are being followed. In addition, a copy of the SSP must be kept in the job file.

Site Description

Client Contact: John Baker, Superintendent

Telephone Number/Email: (650) 482-2230
jbaker@rcsdk8.net

John Gill School

555 Avenue Del Ora

Site Location: **Redwood City, California 94062**

Site Type (Check if Applicable): ☐ Residential ☐ Commercial ☐ Industrial ☐ Undeveloped ☑ Other School

Notable Features: The Site is an active school in a residential area of Redwood City.

Site Background: The Site has been a school since the late 1940s. The southern portion of the Site will be redeveloped. A transformer is present on the southwest side of the parcel. Near-surface and deeper samples will be collected and analyzed in accordance with the scope of work described in the PEA Workplan.

Organizational Structure

Project Manager: Tom McCloskey Site Safety Officer: Chris Vertin

Field Personnel: Chris Vertin

Regulatory Agency Contact: Mellan Songco (DTSC) Phone Number: (916) 255-3590

All of the above personnel have had 40-hour OSHA training and the Project Leader has had 8-hour supervisory training.

Work Plan* (check if applicable)

Objective of the proposed work: Environmental Sampling for PEA

The following would be performed during this project:

- ☐ Excavation / Trenching
- ☐ Drilling / Soil Boring
- ☐ Monitoring Well Installation
- ☐ Well Gauging
- ☐ Well Development
- ☐ Groundwater Sampling
- ☑ Soil Sampling
- ☐ Soil Vapor Sampling
- ☐ Remediation System Installation

☐ Other(s) _____

_____

Chemical Hazards (check if applicable)

Chemical hazards possibly to be on-site in soils and/or groundwater are as follows:

		Symptoms of Over-Exposure
☐	**Gasoline -**	Skin irritant, disturbance of eyes. Deep burning in the throat and respiratory tract and bronchopneumonia. Repeated or chronic dermal contact may result in drying of the skin, lesions, and other dermalogic conditions.
☐	**Diesel -**	Irritation to *skin.* Prolonged breathing at high vapor concentrations can effect central nervous system.
☐	**Benzene -**	Irritation of the eyes, nose, and respiratory system. Headache, giddiness, fatigue, anorexia, staggered gait, and dermatitis.
☐	**Ethylbenzene -**	Irritation of eyes and mucous membranes, headache, dermatitis, narcosis, and coma.
☐	**Toluene -**	Irritation of eyes and mucous membranes, headache, dermatitis, narcosis, and coma.
☐	**Xylenes -**	Dizziness, excitement, drowsiness, staggering gait, irritation of eyes, nose, and throat, nausea, vomiting, and dermatitis.
☑	**Arsenic -**	Irritation of the skin, possible dermatitis, respiratory distress, diarrhea, kidney damage, muscular tremors, seizure; possible gastrointestinal tract and reproductive effects, and possible liver damage.
☑	**Lead -**	Weakness, insomnia, constipation, abdominal pain, colic, anemia, paralysis of the wrists and ankles, encephalopathy, kidney disease, irritation of the eyes, and hypotension.
☑	**Asbestos - NOA**	Difficulty breathing, interstitial fibrosis, restricted pulmonary effects, finger clubbing, and irritation of the eyes.
☑	**OCPs and Chlordane -**	Blurred vision, conjunctivitis, ataxia, delirium, coughing, abdominal pains, nausea, vomiting, diarrhea, irritability, and convolutions.
☐	**Dieldrin -**	Headache, dizziness, nausea, vomiting, sweating, myoclonic limb jerks, clonic and tonic convulsions, and coma.
☑	**Total DDT -**	Irritation of the eyes and skin, paresthesia of the tongue, lips, and face, dizziness, confusion, headache, fatigue, convulsions, and paresis of the hands
☐	**DCA -**	Headaches, loss of appetite, nausea, vomiting, intense jaw pain, and cranial nerve palsy.
☐	**DCE -**	Irritation of eyes and respiratory system, and depression of the central nervous system.
☐	**TCA -**	Irritation of the eyes, skin, nose, throat, and respiratory system, coughing, dyspnea, delayed pulmonary edema, eye and skin burns, dermatitis, salivation, vomiting, and diarrhea.

☐	**TCE -**	Irritation of the eyes and skin, headaches, vertigo, giddiness, sleepiness, nausea, vomiting, dermatitis, cardiac arrhythmia, paresthesia, and liver injury.
☐	**H_2S**	Irritation of the eyes and respiratory system, apnea, coma, convolutions, conjunctivitis, eye pain, lacrimation, photophobia, corneal vesiculation, dizziness, headaches, fatigue, irritability, insomnia, and gastrointestinal disturbance.
☑	**PCBs**	The most commonly observed health effects in people exposed to extremely high levels of PCBs are skin conditions, such as chloracne and rashes. Common symptoms included dermal and ocular lesions, irregular menstrual cycles and lowered immune responses. Other symptoms included fatigue, headaches, coughs, and unusual skin sores.
☐	**Dioxins**	Short-term exposure of humans to high levels of dioxins may result in skin lesions, such as chloracne and patchy darkening of the skin, and altered liver function. Long-term exposure is linked to impairment of the immune system, the developing nervous system, the endocrine system and reproductive functions.
☐	**PAHs**	Eye irritation, nausea, vomiting, diarrhea and confusion. Other symptoms to the skin include irritation and inflammation.
☑	**Radon**	Severe symptoms of long-term exposure to elevated levels may include persistent cough, coughing up blood, wheezing, shortness of breath, hoarseness, chest pain (especially when you laugh), frequent infections such as bronchitis and pneumonia.

Exposure to chemicals should be avoided through proper personal hygiene practices. Although some chemicals can exhibit identifiable acute health effects these exposures are unlikely. Unless the chemical exposure is excessive, it is unlikely that the exposure will be identifiable or exhibit the above symptoms of over-exposure. If you think you have been exposed to a chemical notify your supervisor immediately.

If any of the above symptoms occur, please leave the site for a safe location immediately. First aid should also he given immediately and the Project Manager and Site Safety Officer should be contacted. If needed, emergency procedures should he followed.

Non-Chemical Hazards (check if applicable)

Non-chemical hazards known or suspected to be on-site are as follows:

☑	**Heavy Equipment**	Heavy equipment should he in good working order and operated by an experienced and licensed person in accordance with recognized industry standards. Keep safe distance from heavy machinery so that you would not be in the path of a moving part if it were to swing suddenly. Always be aware of the movements of machinery around you. Approach vehicles from the driver's side. Make sure the vehicle operator sees you. Make eye contact. Personnel working in the vicinity of construction equipment shall wear orange safety vests for increased visibility, hard hat, and steel-toed boots at a minimum. Vehicles should be equipped with a flag, beacon and/or hazard flashers should be activated per the IIPP when working around heavy equipment.
☑	**Slip/Fall Hazards -**	Wet surfaces, inclines, or other obstacles that make movement on-site difficult; good housekeeping shall be practiced and shoes with traction shall be worn.
☑	**Noise -**	Excessive noise can make communication difficult or impossible; workers will be required to wear earplugs for all operations involving the use of power or

pneumatic equipment that generates loud noise levels.

☑ **Heat/Cold Stress -** Physical work in warm weather and/or the use of personal protective equipment may induce heat issues symptoms including cramps, discomfort, and drowsiness, resulting in impaired function; can lead to heat stroke and death. Cool drinking water or other electrolyte replacing liquids shall be available on-site at all times. Work breaks shall be given as necessary, based on temperature and monitoring of workers.

☑ **Vehicular Traffic -** If the work area is in or near traffic areas where vehicular dangers are present, on-sire workers shall wear orange safety vests or other suitable garments marked with or made of reflectorized or high-visibility material. The work area should he clearly marked using signs, barricades, temporary fencing, safety cones, and/or caution tape. Flaggers are to be used to direct traffic if needed.

☐ **Excavation -** Excavation areas present a danger of falling and cave-in. For excavations of less than 5 feet in depth, follow general excavation safety protocols. Never leave open excavations unmarked. If possible, avoid entering any excavation. If entry is necessary and the excavation is greater than 5 feet in depth (even if it is shored), an OSHA excavation permit must he obtained and a separate excavation safety plan shall be prepared

☑ **Underground Utilities -** Subsurface utilities are within the work area and may be encountered during drilling or any subsurface exploration. Utility companies or owners must he contacted and asked to determine the location of the underground utility before excavation. While the excavation is open, underground installations must be protected, supported, or removed to protect employees. When utility companies cannot respond to a request to locate underground utility installations, or cannot establish the exact location of the installations, work may proceed with caution, only upon approval by the Project Manager and Site Safety Officer. Use of detection equipment or other methods of locating utility installations may be additionally required. In an area with suspected underground utilities, all boring locations must he hand probed to a minimum depth of 5 feet.

Please indicate the following were performed prior to work:

☐ **Underground Service Alert (USA)**

☐ **Private Utility Locator**

Please indicate any concerns discussed with wither USA or the private utility locator:

☐ No Concerns Identified

☐ Concerns (Please Describe Below)

_____

_____

_____

☐ **Overhead Lines -** Power and electrical lines are present within the work area. Extreme caution should be used when overhead electrical power or other lines are present. Use of equipment directly under or near lines should be avoided. If possible, the utility company or owner should be contacted to temporary turn off line power or reroute line the path during the course of work in that location.

☐ **Lifting Hazards -** Proper lifting technique should be used by bending at the knees and using the legs for strength. Item being lifted should be held close to the body and back-twisting motions should be avoided.

SITE HEALTH AND SAFETY PLAN FOR SAMPLING

☐	**55-Gallon Drums & Containers -**	Caution should be used when handling drums and other heavy containers. During movement, the integrity of the drums may be compromised. Drums or containers on-site may be cracked, dented, or altered such that lids are not securely attached. If needed, contents should be secured in another drum, or drums should be placed in drum packers for further protection. Always use the proper equipment, designed for the specific application, when handling and moving heavy objects.
☐	**High Crime Area -**	Any area in which one feels threatened or is known to be a high crime area. Always be aware of your surroundings and never leave equipment unattended.
☐	**Hot Surface -**	Surfaces on-site will be at extreme temperature conditions (i.e. asphalt). Caution should be used around hot surfaces on-site, and steel-toed hoots should not be worn when hot surfaces are present. All hot surface hazards should be marked and taped-off to guard against accidental entry.
☐	**Low Lighting Conditions -**	Time or location may introduce inadequately lit work areas. On-site work should be concluded before dark. If work is anticipated to continue after dark, a light tower should be used in appropriate areas, as directed by the Project Manager and Site Safety Officer.
☑	**Poisonous / Dangerous Animals & Insects**	Including but not limited to snakes, wasps, dogs, cattle, etc. Use caution on-site when dangerous animals and insects are suspected to be present. Avoid contact when possible and if the situation becomes threatening, leave the site immediately. If allergic to insect stings, always carry an anaphylactic shock kit.
☐	**Confined Space -**	Any space that limits or constricts entry or exit; is not designed for continuous employee occupancy; has unfavorable natural ventilation. Examples of possible confined spaces include tanks, vessels, excavations, silos, storage bins, etc. For all work in confined spaces, a separate confined space entry program and permit must be established.
☐	**Other -(Specify) _____**	

Emergency Notification

Local Police, 911 or if NA: (650) 780-7100 – Redwood City Police Department, Non-Emergency Calls

State Police, 911 or if NA:

Fire, 911 or if NA : (650) 780-7400 – Redwood City Fire Department

Ambulance, 911 or if NA:

SITE HEALTH AND SAFETY PLAN FOR SAMPLING

Medical (Attach Map--Mandatory)

Nearest Hospital: Kaiser Permanente Redwood City Medical Center,1100 Veterans Blvd., Redwood City, CA 94062

Hospital Telephone Number: (650) 299-2000

Directions: **See Attached Map** **Figure A-1**

Local Regulatory Agencies

Central Valley Regional Water Quality Control Board (559) 445-5116	Department of Toxic Substances Control (800) 728-9642	San Mateo County Environmental Health Division (650) 372-6200
		Other:

Communications

☐ Two-Ways Radios ☑ Cellular Phone ☑ Verbal

Personal Protective Equipment (PPE)

Appropriate on-site personnel have had the 40-hour OSHA class in Hazardous Waste Operations / Emergency Response.

Level of Protective Equipment ☐ A ☐ B ☐ C ☑ D ☑ See PPE Below

The following PPE is required to be available on-site and is to be used on an as needed basis:

☐ Hard Hat	☑ Safety Eye Wear (Type) _____
☑ Safety Boots	☐ Respirator (Type) _____
☑ Orange Vest	Filter (Type) _____
☑ Hearing Protection	☑ Gloves (Type) Nitrile
☐ Tyvex Coverall	☐ Other _____

Monitoring Equipment On-Site

The following monitoring equipment is to be available on-site and is to be used on an as needed basis:

☐ Organic Vapor Meter	☐ Draeger Tube _____
☐ Oxygen Meter	☐ Passive Dosimeter
☐ Combustible Gas Meter	☐ Air Sampling Pump

☐ H_2S Meter ☐ Filter Media _____

All field equipment shall be properly calibrated and functioning normally. If the equipment calibration date is unknown, the equipment should be taken out of service until calibrated to manufacturers specifications.

Site Control Procedures

All unauthorized persons shall be kept a safe distance form the work area. The work area shall be denoted with fencing, barricades, cones, and/or barrier tape.

Decontamination

Standard procedures, unless notified otherwise by the Project Manager and/or Site Safety Officer.

Personnel: Wash with soap and water.

Equipment: All sampling equipment is to be cleaned with a steam cleaner or a liquinox solution and distilled water prior to use at each sampling location.

Standard Safe Work Practices

1. Eating, drinking, chewing gum or tobacco, and smoking are prohibited in the contaminated or potentially contaminated area where the possibility for the transfer of contaminants exists.

2. Avoid contact with potentially contaminated substances. Do not walk through puddles, pools, mud, etc. Avoid, whenever possible, kneeling on the ground and leaning or sitting on equipment or the ground. Do not place monitoring equipment on potential contaminated surfaces (i.e., ground, etc.).

3. All field crew members should make use of their senses to alert them to potentially dangerous situations in which they should not become involved (i.e., the presence of strong, irritating, or nauseating odors).

4. Prevent spillage to the extent possible. In the event that a spill occurs, contain liquid if possible.

5. Prevent splashing of the contaminated materials.

6. Field crew members shall be familiar with the physical characteristics of the site, including:

- Wind direction in relation to work area contaminant location;
- Accessibility of other workers, equipment, vehicles;
- Communications;
- Exclusion zone (areas of known or suspected contamination);
- Site access;
- Nearest water source;
- The location of the nearest telephone;
- The location of the nearest medical facility.

7. The number of personnel and equipment in the contaminated area should be minimized, but only to the extent consistent with workforce requirements for safe site operations.

8. Personal Protection Equipment must be used properly to their fullest extent.

9. For more information, please review (Injury and Illness Prevention Program).

Standard Site Safety Protocol

1. If the site is located in a neighborhood known for high crime (e.g., East Palo Alto, South-Central Los Angeles, the Tenderloin in San Francisco, etc.) discuss personal protection, such as hiring of security personnel, with your Project Manager.

2. Leave the site destination, including address and time expected to return with Project Manager. If the Project Manager is not in the office, leave the information with another person who has knowledge of the project.

3. Always take a radio or cellular phone along for quick communication. Keep the radio and/or cellular phone on your person. (It will not do you any good in the truck).

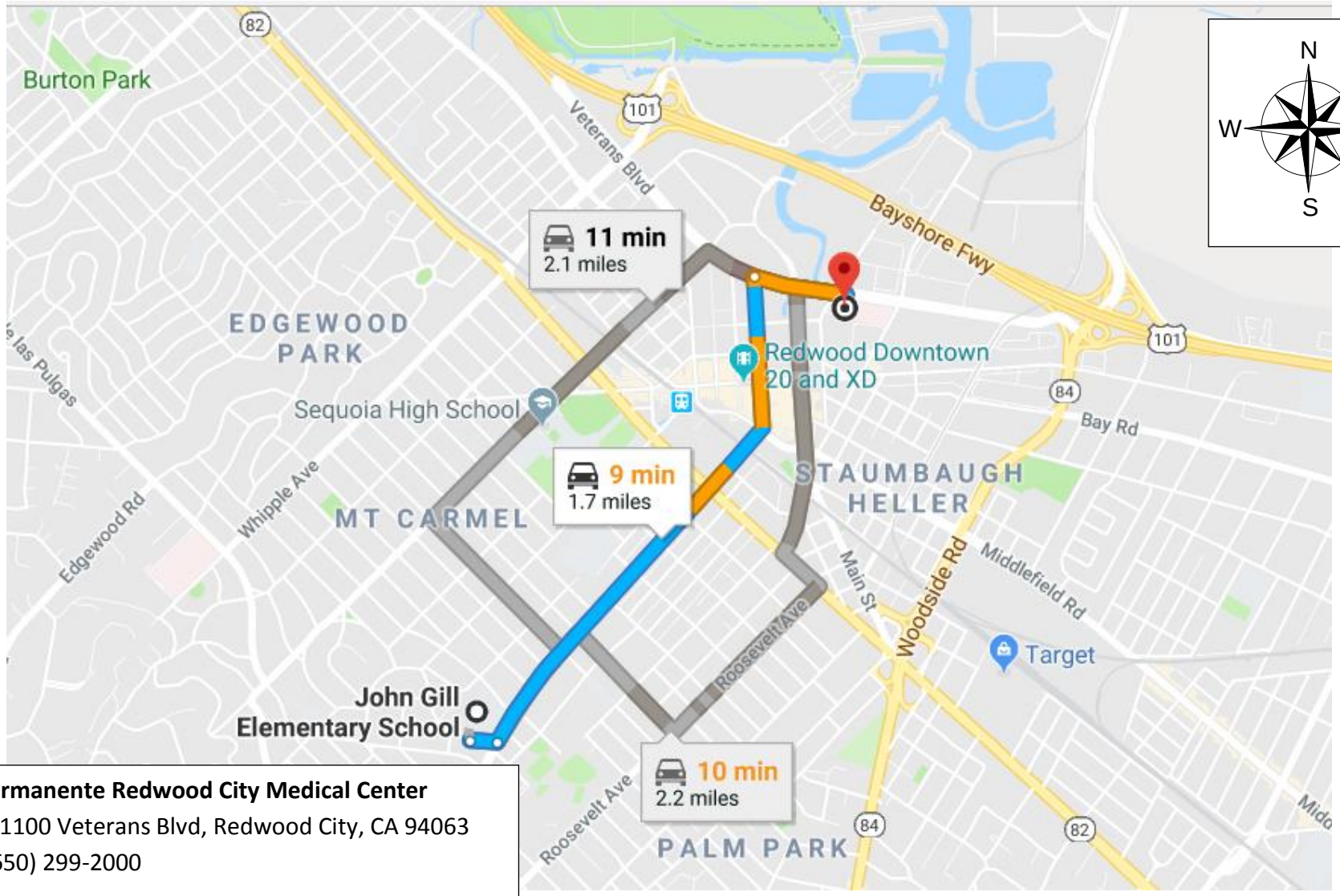
4. Be aware of your surroundings and trust your instincts. Leave if you feel threatened.

5. Do not stay on-site alone after dark unless the Project Manager is aware.

6. If the site visit will take place in or near a high crime neighborhood, fill the vehicle with gasoline prior to entering the area, take a map, drive with the doors locked, and avoid stopping in unfamiliar areas.

7. While performing the site visit, keep the key readily accessible, and the vehicle nearby. If possible, for quick access.

8. Do not carry large amounts of cash on your person and do not give any money to pan handlers as this encourages others to approach you.



Kaiser Permanente Redwood City Medical Center
Address: 1100 Veterans Blvd, Redwood City, CA 94063
Phone: (650) 299-2000

From the Site head **East** on **Avenue Del Ora** toward **Jefferson Ave**;
Turn **Left** onto **Jefferson Ave**;
Turn **Right** onto **Veterans Blvd**;
Arrive at **1100 Veterans Blvd**, on **Right Hand** Side.
Estimated Distance: 1.7 Miles

Map to Nearest Hospital

John Gill School PEA
555 Avenue Del Ora
Redwood City, CA 94062

FIGURE D-1

McCloskey Consultants

Appendix E

Laboratory State Certification

CALIFORNIA
Water Boards

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board

March 2, 2017

Mukesh Jani
Torrent Laboratory, Inc.
483 Sinclair Frontage Road
Milpitas, CA 95035

Dear Mukesh Jani: Certificate No. 1991

This notice advises that the laboratory named above has been certified as an environmental testing laboratory pursuant to the provisions of the Health and Safety Code (HSC), Division 101, Part 1, Chapter 4, Section 100825, *et seq.*

The Fields of Testing for which this laboratory has been certified are indicated on the enclosed "Fields of Testing" list. The certificate shall remain in effect until **April 30, 2018** unless it is revoked. This certificate is subject to an annual fee as determined by HSC 100860.1(a).

The application for renewal of this certificate must be received 90 days prior to the expiration date to remain in force according to HSC 100845(a). You must submit annual Proficiency Testing results before the due date of your annual fee to remain in compliance.

Any change in laboratory location or alteration to laboratory structure that could adversely affect quality of analysis in certified methods require notification prior to the change. Notification is also required for a transfer in ownership or appointment of new laboratory director within 30 days of the change (HSC, Section 100845(b) and (d)).

Your continued cooperation with the above requirements is essential for maintaining the high quality of the data produced by environmental laboratories certified by the State of California.

For general inquiries, please contact our office at the phone number or email address listed below. For specific concerns regarding your application, please call (916) 341-5175 or email Christine.Sotelo@waterboards.ca.gov.

Sincerely,

Christine Sotelo, Chief
Environmental Laboratory Accreditation Program

Enclosure

CALIFORNIA Water Boards
STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

CALIFORNIA STATE
ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM
Accredited Fields of Testing

Torrent Laboratory, Inc.

Certificate No. 1991
Expiration Date 4/30/2018

Phone: (408) 263-5258

Field of Testing: 101 - Microbiology of Drinking Water

101.050	001	Total Coliform P/A	SM9223B (Colilert)
101.060	002	Total Coliform P/A	SM9223B
101.060	003	E. coli P/A	SM9223B
101.140	001	Enterococci	SM9230B
101.150	001	Enterococci	SM9230C
101.300	001	E. coli P/A	SM9223B (Colilert)
101.310	001	Enterococci	Enterolert
245.1	001	Heterotrophic Bacteria	SM9215B

Field of Testing: 102 - Inorganic Chemistry of Drinking Water

102.015	001	Hydrogen Ion (pH)	EPA 150.1
102.020	001	Turbidity	EPA 180.1
102.030	001	Bromide	EPA 300.0
102.030	002	Chlorate	EPA 300.0
102.030	003	Chloride	EPA 300.0
102.030	005	Fluoride	EPA 300.0
102.030	006	Nitrate	EPA 300.0
102.030	007	Nitrite	EPA 300.0
102.030	008	Phosphate, Ortho	EPA 300.0
102.030	010	Sulfate	EPA 300.0
102.045	001	Perchlorate	EPA 314.0
102.047	001	Perchlorate	EPA 331.0
102.095	001	Turbidity	SM2130B-2001
102.100	001	Alkalinity	SM2320B-1997
102.120	001	Hardness (calculation)	SM2340B-1997
102.130	001	Conductivity	SM2510B-1997
102.140	001	Residue, Filterable TDS	SM2540C-1997
102.175	001	Chlorine, Free	SM4500-Cl G-2000
102.175	002	Chlorine, Total Residual	SM4500-Cl G-2000
102.190	001	Cyanide, Total	SM4500-CN E
102.203	001	Hydrogen Ion (pH)	SM4500-H+ B-2000
102.260	001	Total Organic Carbon TOC	SM5310B-2000
102.261	001	Dissolved Organic Carbon (DOC)	SM5310B-2000
102.270	001	Surfactants	SM5540C
102.520	001	Calcium	EPA 200.7
102.520	002	Magnesium	EPA 200.7
102.520	003	Potassium	EPA 200.7
102.520	004	Silica	EPA 200.7
102.520	005	Sodium	EPA 200.7

As of 3/2/2017 , this list supersedes all previous lists for this certificate number.
Customers: Please verify the current accreditation standing with the State.

#Name?

102.520	006	Hardness (calculation)	EPA 200.7

Field of Testing: 103 - Toxic Chemical Elements of Drinking Water

103.130	001	Aluminum	EPA 200.7
103.130	003	Barium	EPA 200.7
103.130	005	Cadmium	EPA 200.7
103.130	007	Chromium	EPA 200.7
103.130	008	Copper	EPA 200.7
103.130	009	Iron	EPA 200.7
103.130	011	Manganese	EPA 200.7
103.130	012	Nickel	EPA 200.7
103.130	015	Silver	EPA 200.7
103.130	017	Zinc	EPA 200.7
103.130	018	Boron	EPA 200.7
103.140	002	Antimony	EPA 200.8
103.140	003	Arsenic	EPA 200.8
103.140	004	Barium	EPA 200.8
103.140	005	Beryllium	EPA 200.8
103.140	006	Cadmium	EPA 200.8
103.140	007	Chromium	EPA 200.8
103.140	008	Copper	EPA 200.8
103.140	009	Lead	EPA 200.8
103.140	010	Manganese	EPA 200.8
103.140	012	Nickel	EPA 200.8
103.140	013	Selenium	EPA 200.8
103.140	014	Silver	EPA 200.8
103.140	015	Thallium	EPA 200.8
103.140	016	Zinc	EPA 200.8
103.140	018	Vanadium	EPA 200.8
103.160	001	Mercury	EPA 245.1
103.310	001	Chromium (VI)	EPA 218.6

Field of Testing: 104 - Volatile Organic Chemistry of Drinking Water

104.040	000	Volatile Organic Compounds	EPA 524.2
104.040	001	Benzene	EPA 524.2
104.040	007	n-Butylbenzene	EPA 524.2
104.040	008	sec-Butylbenzene	EPA 524.2
104.040	009	tert-Butylbenzene	EPA 524.2
104.040	010	Carbon Tetrachloride	EPA 524.2
104.040	011	Chlorobenzene	EPA 524.2
104.040	015	2-Chlorotoluene	EPA 524.2
104.040	016	4-Chlorotoluene	EPA 524.2
104.040	019	1,3-Dichlorobenzene	EPA 524.2
104.040	020	1,2-Dichlorobenzene	EPA 524.2
104.040	021	1,4-Dichlorobenzene	EPA 524.2
104.040	022	Dichlorodifluoromethane	EPA 524.2
104.040	023	1,1-Dichloroethane	EPA 524.2
104.040	024	1,2-Dichloroethane	EPA 524.2

As of 3/2/2017 , this list supersedes all previous lists for this certificate number.
Customers: Please verify the current accreditation standing with the State.

#Name?

104.040	025	1,1-Dichloroethene	EPA 524.2
104.040	026	cis-1,2-Dichloroethene	EPA 524.2
104.040	027	trans-1,2-Dichloroethene	EPA 524.2
104.040	028	Dichloromethane	EPA 524.2
104.040	029	1,2-Dichloropropane	EPA 524.2
104.040	033	cis-1,3-Dichloropropene	EPA 524.2
104.040	034	trans-1,3-Dichloropropene	EPA 524.2
104.040	035	Ethylbenzene	EPA 524.2
104.040	037	Isopropylbenzene	EPA 524.2
104.040	039	Naphthalene	EPA 524.2
104.040	041	N-propylbenzene	EPA 524.2
104.040	042	Styrene	EPA 524.2
104.040	044	1,1,2,2-Tetrachloroethane	EPA 524.2
104.040	045	Tetrachloroethene	EPA 524.2
104.040	046	Toluene	EPA 524.2
104.040	048	1,2,4-Trichlorobenzene	EPA 524.2
104.040	049	1,1,1-Trichloroethane	EPA 524.2
104.040	050	1,1,2-Trichloroethane	EPA 524.2
104.040	051	Trichloroethene	EPA 524.2
104.040	052	Trichlorofluoromethane	EPA 524.2
104.040	054	1,2,4-Trimethylbenzene	EPA 524.2
104.040	055	1,3,5-Trimethylbenzene	EPA 524.2
104.040	056	Vinyl Chloride	EPA 524.2
104.040	057	Xylenes, Total	EPA 524.2
104.045	000	Trihalomethanes, Total	EPA 524.2
104.045	001	Bromodichloromethane	EPA 524.2
104.045	002	Bromoform	EPA 524.2
104.045	003	Chloroform	EPA 524.2
104.045	004	Dibromochloromethane	EPA 524.2
104.050	000	Gasoline Additives	EPA 524.2
104.050	002	Methyl tert-butyl Ether (MTBE)	EPA 524.2
104.050	004	tert-Amyl Methyl Ether (TAME)	EPA 524.2
104.050	005	Ethyl tert-butyl Ether (ETBE)	EPA 524.2
104.050	006	Trichlorotrifluoroethane	EPA 524.2
104.050	007	tert-Butyl Alcohol (TBA)	EPA 524.2
104.050	008	Carbon Disulfide	EPA 524.2
104.050	009	Methyl Isobutyl Ketone	EPA 524.2

Field of Testing: 105 - Semi-volatile Organic Chemistry of Drinking Water

105.201	001	Haloacetic Acids (HAA5)	EPA 552.3
105.230	000	Dioxins	EPA 1613B
105.230	001	2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	EPA 1613B

Field of Testing: 107 - Microbiology of Wastewater

107.010	001	Heterotrophic Bacteria	SM9215B
107.060	002	Total Coliform (Enumeration)	SM9222B-1997
107.080	002	Fecal Coliform (Enumeration)	SM9222D-1997
107.242	001	Enterococci	Enterolert

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#Name?

107.244	001	Enterococci	EPA 1600
107.245	002	E. coli (Enumeration)	SM9223B (Colilert)

Field of Testing: 108 - Inorganic Chemistry of Wastewater

108.020	001	Conductivity	EPA 120.1
108.110	001	Turbidity	EPA 180.1
108.112	002	Calcium	EPA 200.7
108.112	003	Hardness (calculation)	EPA 200.7
108.112	004	Magnesium	EPA 200.7
108.112	005	Potassium	EPA 200.7
108.112	007	Sodium	EPA 200.7
108.113	003	Magnesium	EPA 200.8
108.120	001	Bromide	EPA 300.0
108.120	002	Chloride	EPA 300.0
108.120	003	Fluoride	EPA 300.0
108.120	008	Sulfate	EPA 300.0
108.120	012	Nitrate (as N)	EPA 300.0
108.120	013	Nitrate-Nitrite (as N)	EPA 300.0
108.120	014	Nitrite (as N)	EPA 300.0
108.120	015	Phosphate, Ortho (as P)	EPA 300.0
108.323	001	Chemical Oxygen Demand	EPA 410.4
108.360	001	Phenols, Total	EPA 420.1
108.381	001	Oil and Grease	EPA 1664A
108.381	002	Oil & Grease Total	EPA 1664 Rev. B
108.390	001	Turbidity	SM2130B-2001
108.410	001	Alkalinity	SM2320B-1997
108.420	001	Hardness (calculation)	SM2340B-1997
108.430	001	Conductivity	SM2510B-1997
108.440	001	Residue, Total	SM2540B-1997
108.441	001	Residue, Filterable TDS	SM2540C-1997
108.442	001	Residue, Non-filterable TSS	SM2540D-1997
108.443	001	Residue, Settleable	SM2540F-1997
108.465	001	Chlorine, Total	SM4500-Cl G-2000
108.465	002	Chlorine, Free	SM4500-Cl G-2000
108.470	001	Cyanide, Total	SM4500-CN B or C-1999
108.472	001	Cyanide, Total	SM4500-CN C,E-1999
108.490	001	Hydrogen Ion (pH)	SM4500-H+ B-2000
108.502	002	Ammonia (as N)	SM4500-NH3 B,E-1997
108.503	002	Kjeldahl Nitrogen, Total (as N)	SM4500-NH3 B,E-1997
108.512	001	Kjeldahl Nitrogen, Total (as N)	SM4500-Norg C-1997
108.585	001	Sulfide (as S)	SM4500-S= F-2000
108.592	001	Biochemical Oxygen Demand	SM5210B-2001
108.592	002	Carbonaceous BOD	SM5210B-2001
108.595	001	Chemical Oxygen Demand	SM5220D-1997
108.596	001	Organic Carbon-Total (TOC)	SM5310B-2000
108.605	001	Surfactants	SM5540C-2000
108.660	001	Chemical Oxygen Demand	HACH8000

Torrent Laboratory, Inc.

Certificate No 1991
Expiration Date 4/30/2018

Field of Testing: 109 - Toxic Chemical Elements of Wastewater			
109.010	001	Aluminum	EPA 200.7
109.010	002	Antimony	EPA 200.7
109.010	003	Arsenic	EPA 200.7
109.010	004	Barium	EPA 200.7
109.010	005	Beryllium	EPA 200.7
109.010	006	Boron	EPA 200.7
109.010	007	Cadmium	EPA 200.7
109.010	009	Chromium	EPA 200.7
109.010	010	Cobalt	EPA 200.7
109.010	011	Copper	EPA 200.7
109.010	012	Iron	EPA 200.7
109.010	013	Lead	EPA 200.7
109.010	015	Manganese	EPA 200.7
109.010	016	Molybdenum	EPA 200.7
109.010	017	Nickel	EPA 200.7
109.010	019	Selenium	EPA 200.7
109.010	021	Silver	EPA 200.7
109.010	023	Thallium	EPA 200.7
109.010	024	Tin	EPA 200.7
109.010	026	Vanadium	EPA 200.7
109.010	027	Zinc	EPA 200.7
109.020	002	Antimony	EPA 200.8
109.020	003	Arsenic	EPA 200.8
109.020	004	Barium	EPA 200.8
109.020	005	Beryllium	EPA 200.8
109.020	006	Cadmium	EPA 200.8
109.020	007	Chromium	EPA 200.8
109.020	008	Cobalt	EPA 200.8
109.020	009	Copper	EPA 200.8
109.020	010	Lead	EPA 200.8
109.020	011	Manganese	EPA 200.8
109.020	012	Molybdenum	EPA 200.8
109.020	013	Nickel	EPA 200.8
109.020	014	Selenium	EPA 200.8
109.020	015	Silver	EPA 200.8
109.020	016	Thallium	EPA 200.8
109.020	017	Vanadium	EPA 200.8
109.020	018	Zinc	EPA 200.8
109.104	001	Chromium (VI)	EPA 218.6
109.190	001	Mercury	EPA 245.1
Field of Testing: 110 - Volatile Organic Chemistry of Wastewater			
110.040	000	Purgeable Organic Compounds	EPA 624
Field of Testing: 111 - Semi-volatile Organic Chemistry of Wastewater			
111.100	000	Base/Neutral & Acid Organics	EPA 625
111.111	000	Dioxins and Dibenzofurans	EPA 1613B

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111.170	000	Organochlorine Pesticides and PCBs	EPA 608

Field of Testing: 114 - Inorganic Chemistry of Hazardous Waste

114.010	001	Antimony	EPA 6010B
114.010	002	Arsenic	EPA 6010B
114.010	003	Barium	EPA 6010B
114.010	004	Beryllium	EPA 6010B
114.010	005	Cadmium	EPA 6010B
114.010	006	Chromium	EPA 6010B
114.010	007	Cobalt	EPA 6010B
114.010	008	Copper	EPA 6010B
114.010	009	Lead	EPA 6010B
114.010	010	Molybdenum	EPA 6010B
114.010	011	Nickel	EPA 6010B
114.010	012	Selenium	EPA 6010B
114.010	013	Silver	EPA 6010B
114.010	014	Thallium	EPA 6010B
114.010	015	Vanadium	EPA 6010B
114.010	016	Zinc	EPA 6010B
114.020	001	Antimony	EPA 6020
114.020	002	Arsenic	EPA 6020
114.020	003	Barium	EPA 6020
114.020	004	Beryllium	EPA 6020
114.020	005	Cadmium	EPA 6020
114.020	006	Chromium	EPA 6020
114.020	007	Cobalt	EPA 6020
114.020	008	Copper	EPA 6020
114.020	009	Lead	EPA 6020
114.020	010	Molybdenum	EPA 6020
114.020	011	Nickel	EPA 6020
114.020	012	Selenium	EPA 6020
114.020	013	Silver	EPA 6020
114.020	014	Thallium	EPA 6020
114.020	015	Vanadium	EPA 6020
114.020	016	Zinc	EPA 6020
114.103	001	Chromium (VI)	EPA 7196A
114.106	001	Chromium (VI)	EPA 7199
114.140	001	Mercury	EPA 7470A
114.141	001	Mercury	EPA 7471A
114.222	001	Cyanide	EPA 9014
114.240	001	Corrosivity - pH Determination	EPA 9040B
114.241	001	Corrosivity - pH Determination	EPA 9045C
114.250	001	Fluoride	EPA 9056

Field of Testing: 115 - Extraction Test of Hazardous Waste

115.020	001	Toxicity Characteristic Leaching Procedure (TCLP)	EPA 1311
115.021	001	TCLP Inorganics	EPA 1311
115.022	001	TCLP Extractables	EPA 1311

As of 3/2/2017 , this list supersedes all previous lists for this certificate number.
Customers: Please verify the current accreditation standing with the State.

#Name?

115.030	001	Waste Extraction Test (WET)	CCR Chapter11, Article 5, Appendix II
115.040	001	Synthetic Precipitation Leaching Procedure (SPLP)	EPA 1312
Field of Testing: 116 - Volatile Organic Chemistry of Hazardous Waste			
116.080	000	Volatile Organic Compounds	EPA 8260B
116.080	120	Oxygenates	EPA 8260B
116.100	001	Total Petroleum Hydrocarbons - Gasoline	LUFT GC/MS
116.100	010	BTEX and MTBE	LUFT GC/MS
Field of Testing: 117 - Semi-volatile Organic Chemistry of Hazardous Waste			
117.010	001	Diesel-range Total Petroleum Hydrocarbons	EPA 8015B
117.110	000	Extractable Organics	EPA 8270C
117.130	000	Dioxins and Dibenzofurans	EPA 8290
117.170	000	Nitroaromatics and Nitramines	EPA 8330
117.210	000	Organochlorine Pesticides	EPA 8081A
117.220	000	PCBs	EPA 8082
Field of Testing: 120 - Physical Properties of Hazardous Waste			
120.070	001	Corrosivity - pH Determination	EPA 9040B
120.080	001	Corrosivity - pH Determination	EPA 9045C
Field of Testing: 126 - Microbiology of Recreational Water			
126.020	001	Total Coliform (Enumeration)	SM9222B-1997
126.040	001	Fecal Coliform (Enumeration)	SM9222D-1997
126.080	001	Enterococci	Enterolert

Appendix F

Assessor's Parcel Map

TAX CODE AREA - - - - - -

BK-52

31

58-16

CENTRAL PARK

MAP NO. 2

100'

1" =

MYRTLE

AVE

JAMES

HARRISON

JAMES AVE

AVENUE DEL

EAGLE HILL TERRACE

JEFFERSON

AVE.

ST.

NEVADA ST.

ORA

QUARTZ ST.

SOUTH PL.

JOHN GILL SCHOOL

R. C. SCHOOL DIST.

CITY & CO. OF SAN FRANCISCO R. W.

U.S. 6

L.P.

P.S.

162

161

NEW HIGH SCHOOL ACRES 15

1 LEXINGTON PARK RSM 17/25

2 PERKINS SUB. RSM 22/36

3 EAGLE HILL VILLA TRACT SUB. 2 RSM 8/5

4 UNREC. SUB. OF LOT 6 EAGLE HILL VILLA TRACT SUB. 2

G.L.

ASSESSOR'S MAP COUNTY OF SAN MATEO CA.

4-76

Appendix J
Soil Mitigation Plan

Soil Mitigation Plan

John Gill Elementary School

Redwood City, California

Prepared for:
Redwood City Unified School District

November 16, 2018

Prepared by:
McCloskey Consultants, Inc.



SOIL MITIGATION PLAN

John Gill Elementary School

555 Avenue Del Ora

Redwood City, California

November 16, 2018

Prepared for:

REDWOOD CITY UNIFIED SCHOOL DISTRICT

Prepared by:

McCloskey Consultants, Inc.

420 Sycamore Valley Road West

Danville, CA 94526

Christopher M. Vertin
Senior Staff Engineer

Thomas F. McCloskey, P.G., C.E.G., C.Hg.
President and Principal Geologist

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Appendix D Health and Safety Plan
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Appendix F DTSC Advisory on Imported Fill Material

1.0 INTRODUCTION

1.1 Statement of Purpose

McCloskey Consultants, Inc. (MCI) was retained by Redwood City Unified School District (RCUSD) to prepare this Soil Mitigation Plan (SMP) for the proposed renovation/redevelopment of the southern portion of the existing John Gill Elementary School located at 555 Avenue Del Ora, in Redwood City, San Mateo County, California (Site). The Site location and vicinity map is included as Figure 1. The SMP was prepared to provide a technical and operational plan for removal activities at the Site and the management of NOA containing soils at the Site. The SMP will establish protocols for the excavation, loading, transportation and landfill disposal of soils containing residual concentrations of contaminants and the prevention or reduction of exposure to NOA-containing soils.

1.2 Site Description

The Site consists of an irregularly-shaped parcel of land designated as assessor's parcel number (APN) 058-161-390 by the San Mateo County Assessor's Office (SMCAO). John Gill School, including the Site, is approximately 6.90 acres (300,564 square feet) in size. The Site elevation averages approximately 60 feet above mean sea level. Site topography slopes moderately towards the east and northeast. The vicinity topography slopes more gently towards the northeast. The Site is currently improved with two permanent classroom buildings connected by a covered breezeway, a portable class and art room structure, an elevator building, and associated landscaping and asphalt- and concrete-paved play, parking, and driveway areas and stairways.

MCI understands current redevelopment plans include: (1) demolition of two permanent classroom buildings, the portable building, and the existing elevator building; (2) construction of a new two-story classroom building in place of the existing buildings; and (3) construction of a new lunch shelter east of the existing elevator building. The expansion will include the addition of four new classrooms with an expected increase in student population by approximately 100 students. The driveway entrance to the school from Avenue Del Ora will be reconfigured and the parking spaces relocated.

1.3 Site Background and Investigations

According to information obtained in the Phase I Environmental Site Assessment (ESA), the original Eagle Hill School building was constructed in 1931 in an area on the school parcel north of the Site (MCI, 2017). The Site has been utilized for educational purposes since that time. Based on available information, the Site does not appear to have been utilized for agricultural purposes

such as row crops or orchards within the time frame of the historical documentation. The Site is currently used as an elementary school.

1.3.1 Phase I Environmental Site Assessment

The Phase I Environmental Site Assessment (ESA) (MCI, 2017) was performed to comply with ASTM E1527-13 and included the review of the Site history including 107 Federal, State, and Local databases as well as local fire and building departments and the performance of a Site reconnaissance for indications of hazardous materials including underground storage tanks both on Site and in the Site vicinity. The purpose of this work was to identify indications of documented Site uses or vicinity potential releases of contaminants to soil.

1.3.2 Preliminary Environmental Assessment

A Preliminary Environmental Assessment (PEA) is an initial investigation that provides the information necessary for determining if conditions exist at the Site that could pose a risk to human health or the environment. To evaluate the soil at the Site for the potential presence of contamination that could affect Site development, a PEA investigation was performed by MCI. On December 13, 2017, a pre-scoping PEA Site visit was conducted by the Department of Toxic Substances Control (DTSC), Schools Program. Participants included Mellan Songco (DTSC, Schools Program Project Manager), Vivek Mathrani (DTSC Toxicologist), Donald Dias (Bond Program Director), William Robertson (RGM and Associates), Regina Bills-Dacong (School Site Solutions), and Tom McCloskey (MCI). The scope of sampling work developed for the Site was based on the Site history and DTSC guidance documents for NOA containing soils. The "*Preliminary Environmental Assessment Workplan, John Gill Extension, Redwood City"* (Workplan) was then prepared for DTSC review and comment (MCI, 2018). The Workplan was approved by the DTSC in their letter dated April 10, 2018 (Appendix A) prior to implementation of the sampling.

Soil sampling was performed at the Site to evaluate the potential presence of manmade and/or naturally-occurring chemicals that could affect the proposed school development. Forty-two soil samples were collected from the following areas on the Site: building perimeters; an historical structure, and exposed soils. Analyses included select metals, organochlorine pesticides (OCPs), polychlorinated biphenyls (PCBs), semi-volatile organic compounds (SVOCs)/polycyclic aromatic hydrocarbons (PAHs), and/or naturally occurring asbestos (NOA) (Tables 1 through 5 in Appendix B).

1.3.2.1 Building Perimeters

Soil samples were collected from seventeen building perimeter (including the portable classroom/art structure) locations (BP-1 through BP-17) to evaluate the possibility of lead-based paint flakes in near-surface soils, PCBs associated with flaking of window caulking and glazing, and historical application or injection of termiticides (OCPs) around the building foundations. Soil

samples were collected at approximate 0.5-foot intervals and depending on the condition of the ground surface (i.e., exposed soil versus asphalt- or concrete-covered), at depths of ½ to 1-foot below ground surface (bgs), 1 to 1½ feet bgs, and/or 2 to 2½ feet bgs.

Concentrations of several pesticides were detected around the perimeter of the buildings. Concentrations of 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, dieldrin, endosulfan I, heptachlor, heptachlor epoxide, hexachlorobenzene and technical chlordane were detected in at least one of the samples collected. An elevated concentration of technical chlordane was detected at sampling location BP-12 (2- 2½ feet bgs) at a concentration of 1.57 milligrams per kilogram (mg/kg). The concentration exceeded its single compound DTSC Human and Ecological Risk Office (HERO) Human Health Risk Assessment (HHRA) Note 3 screening levels (HHRA screening levels) for residential soil of 0.44 mg/kg. No other OCPs were detected at or above applicable screening levels.

Arsenic concentrations ranging from 2.16 mg/kg to 30.6 mg/kg were detected in 19 of the sample collected from the building perimeters. The reported arsenic concentrations exceed the USEPA RSL for residential land use of 0.68 mg/Kg; however, naturally occurring arsenic concentrations in San Mateo County soils and San Francisco Bay Region commonly exceed these screening criteria. The naturally-occurring arsenic concentration in the San Francisco Bay Region has been investigated most recently by Duverge' (2011) who found a maximum concentration for naturally-occurring arsenic to be 11 mg/Kg. Site specific maximum arsenic concentrations were evaluated by plotting the arsenic results on a Q-Q scatter plot and show the Site-specific background concentration to be approximately 8.0 mg/kg. Only the concentration of 30.6 mg/kg detected at sampling location BP-9 exceeded the Site-specific background concentration.

Cobalt was detected in one soil sample (BP-13 at 1-1.5 feet bgs) at a concentration of 32.9 mg/kg, exceeding the USEPA RSL of 23 mg/Kg. Cobalt was also detected at sampling location BP-2 (1-1½ feet bgs) at a concentration of 20.8 mg/kg slightly less than the regulatory threshold. The elevated concentrations of cobalt were co-located with elevated concentrations of total chromium and nickel that appear consistent with naturally-occurring ultramafic rock (serpentinite). Chrysotile asbestos was detected at both sampling locations further indicating a presence of naturally-occurring ultramafic rock at the sampling location. Naturally-occurring concentrations in the SF Bay Peninsula area range up to 70 mg/kg (USGS, 1984) and therefore this concentration is likely naturally occurring.

PCB concentrations were only detected in one sample exceeding the laboratory detection limits. Aroclor 1260 was detected at an estimated ("J") concentration of 0.00684 mg/kg at sampling location BP-10. The estimated concentration did not exceed the applicable screening levels.

Semi-Volatile organic compounds and polycyclic aromatic compounds (PAHs) were detected in three of four soil samples collected along building perimeters. Two soil samples, BP-5 (1-1½ feet bgs) and BP-10 (1-1½ feet bgs), contained benzo(a)pyrene at concentrations of 0.0739 and 0.0687 mg/Kg, respectively. None of the concentrations of SVOCs/PAHs detected exceeded their respective USEPA RSLs.

1.3.2.2 Historical Structures

Soil samples were collected at two locations (HS-1 and HS-2) in the vicinity of historical structures to evaluate the possibility of lead-based paint flakes in near-surface soils, PCBs associated with window caulking and glazing, and injected termiticides (OCPs).

Concentrations of 4,4'-DDE and technical chlordane were detected in one of the samples collected in the vicinity of the historical structures. The concentrations detected were less than their respective regulatory thresholds. No other OCPs were detected at or above their respective reporting limits.

No PCBs were detected at or above their respective reporting limits in the sample

Arsenic concentrations of 2.93 mg/kg and 4.05 mg/kg were detected in the samples collected from the vicinity of historical structures. The reported arsenic concentrations exceed the USEPA RSL for residential land use of 0.68 mg/Kg; however, neither of the concentrations detected exceeded the Site-specific background concentration of 8.0 mg/kg.

1.3.2.3 Newer Fill

One soil sample (FB-1 at 1-1½ feet bgs) was collected from newer fill soils on the east side of the Site to evaluate the possibility of naturally occurring and anthropogenic metals, PCBs associated with window caulking and glazing, and injected termiticides (OCPs).

No PCBs or OCPs were detected at or above their respective reporting limits in the sample.

An arsenic concentration of 10.9 mg/kg was detected in the sample collected from the newer fill material. The reported arsenic concentrations exceed the USEPA RSL for residential land use of 0.68 mg/Kg; and the Site-specific background concentration of 8.0 mg/kg.

PAHs compounds, benzo-a-pyrene, chrysene, fluorene, phenanthrene, and pyrene were detected at estimated concentrations in the sample collected. None of the concentrations detected exceeded their respective regulatory thresholds.

1.3.2.4 Naturally-Occurring Asbestos

The Site is located within 10 miles of ultramafic rock and thus is subject to sampling for the presence of naturally-occurring asbestos (NOA) in accordance with DTSC Schools Unit guidelines. To evaluate this concern, seventeen samples were collected from depths between approximately 6 inches and 5.0 feet bgs at the locations. The samples were collected from fill materials, native soils and bedrock material.

Samples were analyzed by Asbestos TEM Laboratories, Inc. of Berkeley, California. The samples were analyzed for NOA using polarized light microscopy (PLM) in accordance with California Air Resources Board (ARB) Method 435 and a 400-point count, with a reporting limit of 0.25% by counted particle. No chrysotile fibers were detected exceeding the 0.25% detection limit in any of the samples analyzed by the PLM (CARB 435 400 Point Count) method. The NOA sampling results using the PLM method did not exceed the DTSC Schools Program screening level of 0.25%.

Because of the fine-grained nature of some of the Site soils, analyses by Transmission Electron Microcopy (TEM) Quantitative EPA Method (TEM NOA EPA/CARB Quantitative) was requested to resolve the presence of small asbestos fibers. Samples analyzed by the TEM NOA EPA/CARB Quantitative had a reporting limit of less than 0.00001% by dry weight and followed the CARB Method 435 preparation. The prepared samples followed the analytical methods specified in the USEPA bulk method (EPA/600/R-93/116). The laboratory identified all structures with aspect ratios greater than 3:1, and lengths greater than or equal to 0.5 microns. The laboratory counted chrysotile and amphibole particles in seven of the samples analyzed. The NOA concentrations exceeded 0.01% in four of the samples thus exceeding 0.01% in greater than 25% of the native soils and bedrock material which exceeds the DTSC Schools Unit guidelines.

1.3.3 Supplemental Site Assessment (SSI)

Supplemental sampling was performed at four locations (BP-1, BP-12, BP-13, and FB-1) to evaluate the lateral and vertical extent of the elevated arsenic, cobalt and pesticide concentrations detected around some of the existing buildings and in the newer fill materials. Step-out and step-down sampling was completed on September 15, 2018. The additional sampling at location BP-13 identified that the elevated cobalt concentration was associated with the ultramafic rock (NOA) and therefore not a contaminate of concern

The step-out and step-down sampling performed at sampling location BP-9 identified an elevated arsenic concentration of 13.5 mg/kg at the 5-foot step-out sampling location (1-1½ feet bgs) that exceeded the Site-specific background concentration of approximately 8.0 mg/kg. The remaining step-out and step-down arsenic concentrations ranged from 1.51 mg/kg to 6.07 mg/kg. The reported arsenic concentrations exceed the USEPA RSL for residential land use of 0.68 mg/Kg; however, did not exceed the Site-specific background concentration of approximately 8.0 mg/kg.

Based on the sampling results, the lateral and vertical extent of the arsenic contamination at sampling location BP-9 appears to be fully delineated. The laboratory results of the metal analyses are summarized in Table 1, Appendix A.

At sampling location BP-12, low concentrations of heptachlor and heptachlor epoxide were detected in the step-down sample collected from the depth of 3 to 3½ feet bgs. The concentrations detected were significantly less than their respective regulatory thresholds. No other OCPs were detected at or above their respective reporting limits. No OCPs were detected in both of the 5-foot step-out samples exceeding their respective report limits. Based on the sampling results, the lateral and vertical extent of the pesticide contamination at sampling location BP-12 appear to be fully delineated. The laboratory results of the pesticide analyses are summarized in Table 3, Appendix A.

Arsenic was detected in the step-out and step-down samples collected at sampling location FB-1. The arsenic concentration of 13.6 mg/kg detected in the step-down sample collected from 2 ½ to 3 feet bgs exceeded the Site-specific background concentration of approximately 8.0 mg/kg. Arsenic was not detected in the deeper sample collected at sampling location FB-1 (3½ to 4 feet bgs) exceeding the laboratory reporting limit. Arsenic was also detected in three of the step-out samples collected at concentrations ranging from 2.04 mg/kg to 4.13 mg/kg. The reported arsenic concentrations in the step-out samples exceeded the USEPA RSL for residential land use of 0.68 mg/Kg; however, did not exceed the Site-specific background concentration of approximately 8.0 mg/kg. Based on the sampling results, the lateral and vertical extent of the arsenic contamination at sampling location FB-1 appears to be fully delineated. The laboratory results of the metal analyses are summarized in Table 1, Appendix A.

The elevated pesticides and metals concentrations identified in shallow soils will be mitigated by excavation. The soil would be off-hauled and disposed of at an appropriately-licensed landfill prior to Site development. Some of this soil contains arsenic and elevated pesticide concentrations that should be resampled and tested after excavation and stockpiling to determine appropriate transportation and landfill disposal options. Based on the PEA and SSI sampling results, it is not anticipated that the material is hazardous waste.

1.4 Contact Information

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2.0 NATURE, SOURCE, EXTENT OF CONTAMINANTS AND CLEANUP GOALS

2.1 Type, Source and Location of Contaminants

The contaminants present in soil at the Site include organochlorine pesticides (specifically technical chlordane), arsenic, cobalt and naturally-occurring asbestos. The origin of the organochlorine pesticides in soil at the Site appears to be pesticide application in the area around the base of the buildings. The origin of the arsenic in soil at the Site (exceeding naturally-occurring concentrations) appears also to be pesticide, herbicide, or rotocide application in the area around the base of the buildings and in fill material. The NOA in soils is from erosion of NOA containing bedrock in the upland area on three sides of the Santa Clara Valley, the deposition of eroded alluvial sediments containing the NOA in the floodplain and the underlaying native soils and bedrock. The NOA fibers identified in the native soil and bedrock material were chrysotile and amphibole asbestos. The origin of the cobalt in soil at the Site appears to be from naturally-occurring metal concentrations commonly associated with serpentinite rock (NOA) and does not appear to be a contaminant of concern.

2.1.1 Organochlorine Pesticides – Technical Chlordane

Technical chlordane belongs to a group of organochlorine pesticides called cyclodiene insecticides (this group also includes aldrin, endrin, heptachlor, and endosulfan). Cyclodiene insecticides historically were used as soil insecticides and for termite control due to their stability in soil and relative stability when exposed to sunlight. Technical chlordane is a mixture of at least 50 compounds including alpha-and gamma-chlordane, and heptachlor; alpha- and gamma-chlordane.

2.1.2 Arsenic

Arsenic is a naturally-occurring element widely distributed in the earth's crust. In the environment, arsenic is combined with oxygen, chlorine, and sulfur to form inorganic arsenic compounds. Arsenic in animals and plants combines with carbon and hydrogen to form organic arsenic compounds. Organic arsenic compounds have been used as pesticides and herbicides.

2.1.3 Naturally-Occurring Asbestos

The name asbestos is often used as a general term to identify several types of naturally-occurring fibrous minerals. The six main types of asbestos are chrysotile (most common), crocidolite, amosite, asbestiform tremolite, asbestiform actinolite, and asbestiform anthophyllite. The Santa Cruz Mountains contain ultramafic rocks with asbestos that have eroded and resulted in transport and deposition as alluvial sediments. Chrysotile asbestos and the asbestiform actinolite were identified in soils and bedrock at this Site.

The following is a brief description of asbestos:

Common Name: Asbestos. The type of asbestos present at the Site is chrysotile asbestos which in the parent rock has a needle-like appearance as cross-fibers in veins that are greenish in color, and can be seen with the naked eye. After erosion and deposition, powerful microscopes are needed to see the fibers. A few fibers of the asbestiform actinolite were also detected in a few of the samples collected.

Physical Appearance: In the San Francisco Bay Area, chrysotile asbestos may have a "fluffy" appearance and the colors vary from white, gray, brown, green, or yellow. At the site, asbestos occurs naturally in the serpentinite bedrock, which has a characteristic greenish or grayish color. Within this rock, asbestos occurs in thin veins with chrysotile asbestos cross fibers. The soil overlying the serpentinite may also contain naturally occurring asbestos if the soil is a native weathering product of the bedrock.

Physical Properties: Specific Gravity: 2.6. It is a noncombustible solid. The dust particles of concern are very small and, once released, remain suspended in the air for a period of time.

The United States Occupational Safety and Health Administration (OSHA) has defined the term "fiber" as a particulate form of asbestos 5 micrometers (μm) or longer, with a length to width ratio of at least 3 to 1.

Exposure Limits:

Permissible Exposure Limit (PEL): The maximum airborne asbestos concentration an employee may be exposed to as an 8-hour time-weighted average (TWA) for a 40-hour work week is 0.1 fiber per cubic centimeter (cm^3) of air.

Excursion Limit: The maximum airborne asbestos concentration an employee may be exposed to as averaged over a sampling period of 30 minutes is 1.0 fiber longer than 5 μm per cm^3 of air.

Threshold Limit Value: 2.0 fibers longer than 5 μm per $cm^3$of air.

Acute (short term, very high level) Exposure*:* Shortness of breath, chest or abdominal pain, and irritation of the skin and mucous membranes.

Chronic (long-term) Exposure*:* Reduced pulmonary function, breathing difficulty, dry cough, broadening and thickening of the ends of the fingers, and bluish discoloration of the skin and mucous membranes.

2.1.4 Cobalt

Cobalt is a hard, gray metal and is a naturally occurring element found in rocks, soil, water, plants, animals and humans.

Elevated background concentrations of cobalt in soils are commonly found in ultramafic rocks along with elevated nickel and chromium concentrations. Ultramafic rocks were identified in the bedrock material underlying the Site. The elevated cobalt concentrations at the Site appear to be associated with naturally-occurring conditions and do not represent a contaminate of concern for the Site.

2.2 Extent of Contamination

2.2.1 Organochlorine Pesticides

The soils impacted by organochlorine pesticides at the Site appear limited to shallow soils adjacent to one of the original older buildings. The impacted soil generally occurs as a strip (approximately 3 feet wide) adjacent to the building, and in the upper three feet of soil. The distribution of pesticides in exceedance of the relevant USEPA RSLs in shallow soil at the Site is presented on Figure 2.

2.2.2 Arsenic

The soils impacted by arsenic at the Site appear limited to soils adjacent to one of the older original buildings, and the newer fill place on the eastern portion of the Site. The impacted soil generally occurs as a strip (approximately 7 feet wide) adjacent to the building and in a small portion of the upper three feet of fill soil. The distribution of arsenic in exceedance of naturally-occurring concentrations at the Site is presented on Figure 2.

2.2.3 Naturally-Occurring Asbestos

As stated above, NOA was detected exceeding the DTSC Schools Unit threshold in the native soils and bedrock material throughout the Site.

2.3 Health Effects of Contaminants and Exposure Pathways

The United States Department of Health and Human Services, Agency for Toxic Substance & Disease Registry (ATSDR) has prepared ToxFAQs™ fact sheets detailing the most frequency asked

questions about several toxic substances. The fact sheets were used as the primary source for the description of the health hazards of the on-Site contaminants.

2.3.1 Organochlorine Pesticide – Technical Chlordane

Chlorinated cyclodiene insecticides are structurally related by the same mechanism of action including chlordane. The cyclodienes persist in the environment and accumulate in fatty tissues of biologic organisms. The central and peripheral nervous systems are the target organs. Headache, nausea, vomiting, dizziness, and mild chronic jerking are characteristic symptoms of over exposure. Increased exposure can increase the severity of these symptoms and advance to convulsions. The cyclodienes also can produce liver damage.

Chlordane is a class B2 carcinogen based on liver tumors observed in experimental animals. The non-carcinogenic reference doses assigned to the cyclodienes are based on the critical effect of pathologic changes in the liver and increased liver weight of experimental animals.

2.3.2 Arsenic

Humans breathing high levels of inorganic arsenic can result in a sore throat or irritated lungs. Ingesting very high levels of arsenic can result in death. Exposure to lower levels can cause nausea and vomiting, decreased production of red and white blood cells, abnormal heart rhythm, damage to blood vessels, and a sensation of "pins and needles" in hands and feet (ATSDR, 2007b).

Ingesting or breathing low levels of inorganic arsenic for a long time can cause a darkening of the skin and the appearance of small "corns" or "warts" on the palms, soles, and torso.

Skin contact with inorganic arsenic may cause redness and swelling.

Almost nothing is known regarding health effects of organic arsenic compounds in humans. Studies in animals show that some simple organic arsenic compounds are less toxic than inorganic forms. Ingestion of methyl and dimethyl compounds can cause diarrhea and damage to the kidneys.

2.3.3 Asbestos

Asbestos is classified as a known human carcinogen by state, federal, and international agencies. It is believed that exposure to high levels of airborne asbestos over a long period of time (occupational exposure) can cause several types of cancer including “mesothelioma,” “squamous cell carcinoma,” and other forms of lung cancer. Breathing asbestos dust has also been related to scarring of lung tissue called “asbestosis.” Although the studies that identified asbestos as a carcinogen involved high-level exposure in an occupational setting, some health authorities believe that even low levels of exposure may result in an increase in cancer risk. The cancer risk from asbestos exposure is believed to be greater for people who smoke.

2.4 Selection of Contaminants of Concern

To establish soil remediation goals for the future removal actions at the Site, a variety of screening level risk and hazard evaluation regulatory agency documents were used depending on the contaminant. The remediation goals for pesticides and metal concentrations is set forth in the USPEA RSLs which have recommended screening-level remediation goals for technical chlordane. The California HHRA HERO Note 3 screening level for chlordane is less than the USEPA RSLs and therefore will be used as the remediation goal. The remediation goal for the arsenic concentrations was determined by determining the Site-specific naturally-occurring background concentration using a Q-Q scatter plot similarly generated by the use of the ProUCL software used by the USEPA. The remediation goal for NOA at a school site has been established by the DTSC Schools Unit (DTSC, 2004).

USEPA Residential RSLs and HHRA HERO Note 3 are risk-based screening concentrations for carcinogens that are primarily calculated assuming a 30-year residential exposure period via incidental ingestion, dermal contact, and inhalation of airborne chemical constituents from affected soil media. Chemicals were considered for elimination if their maximum detected concentration was less that it's USEPA residential RSL concentration and HHRA HERO Note 3 (chlordane). The second step of the risk screening process is to evaluate those chemicals considered for elimination to determine their potential contribution to human health risk and hazard quotient for a given sample location. Any chemicals eliminated using this screening process will not significantly contribute to risk at the Site. Those screened compounds include all chemicals detected in soil at the Site.

The NOA concentrations in the alluvial soils underlying the entire Site exceed the DTSC Schools Unit guidelines for NOA. To prevent future exposure to Site soils, all soil will be capped with either classroom buildings, hardscape, artificial turf, or capped with clean import fill soils.

2.4.1 Selected Contaminants of Concern

The goal of the planned remediation for chemical contaminants is to remove soils with concentrations exceeding the USEPA RSLs, the updated California HHRA HERO Note 3 as available and naturally-occurring background levels. The selected contaminants of concern (COCs) and their maximum detected concentrations are summarized in the table below. The remedial goals for the COCs and NOA are further discussed in Section 2.5.

Contaminants of Concern and Maximum Concentrations

Compound	Maximum Concentration Detected (mg/kg)
Chlordane	1.57
Arsenic	30.6

2.5 Summary of Remedial Goals

During confirmation sampling each area of the Site subject to removal action will be considered remediated and available for unrestricted use once the individual USEPA RSLs and HHRA HERO Note 3 health screening levels (whichever is lower in concentration for any given Site COC) are achieved for the single chemicals, and if multiple chemicals are present, the cumulative health risk is determined to be less than one-in-one million (1×10^{-6}). For technical chlordane, the HHRA Hero Note 3 health screening level will be used as a cleanup goal (CG) and for arsenic the Site-specific background concentration. The selected contaminants of concern (COCs) and their respective cleanup goals are summarized in the table below.

If multiple pesticides are identified in confirmation soil samples collected during removal actions in the affected areas, the cumulative risk will be calculated using the ratio sum method recommended by the CHHSL guidance (Cal/EPA, 2005) which is identical to USEPA methods. For this Site, the concentrations of each OCPs identified will be divided by its corresponding USEPA RSL of HHRA HERO Note 3 concentration and the results will be summed together. The goal is to establish a total risk not to exceed $1x10^{-6}$. If it appears during remediation that excessive soil removal is occurring, then MCI would consult with the District prior to additional excavation.

Proposed Site Cleanup Goals

Compound	Highest Concentration Detected (mg/kg)	Goal (mg/kg)
Chlordane	1.57	0.440[1]
Arsenic	30.9	8.0[2]

[1] Based on Human Health Risk Assessment (HHRA) Note Number 3, DTSC-modified Screening Levels for Residential Soils, Release Date June, 2018.

[2] The Site-Specific naturally-occurring background concentrations calculated using the Q-Q Scatter Plot, Appendix C.

2.5.1 Arsenic - Soil

To determine the remediation goal for arsenic, a Q-Q Plot of the Site arsenic concentrations was performed to examine a change in the slope of the plotted data. The break in the slope indicates

the upper limit of naturally-occurring arsenic concentrations from man-made arsenic. The concentrations of 30.6 mg/kg was excluded to expand the vertical scale and allow better resolution of the break in slope. The result of this plotting is included in Appendix C and indicates that the naturally-occurring maximum concentration of arsenic is about 8.0. mg/kg.

This CG shall be considered achieved when the excavations have been completed, confirmation samples have been collected, and the 95% UCL of the arithmetic mean of the data set

2.5.2 OCPs - Soil

In accordance with DTSC guidance, the CGs for OCPs will be the USEPA residential RSLs and HHRA HERO Note 3 health screening levels (whichever is lower in concentration for any given Site COC). Only technical chlordane was detected on-Site at an elevated concentration. The HHRA HERO Note 3 health screening level for technical chlordane 0.44 mg/kg (DTSC, 2018).

2.5.3 NOA

The NOA concentrations in the alluvial soils underlying the entire Site exceed the DTSC Schools Unit guidelines for NOA. To prevent future exposure to Site soils, all soils will be capped with either classroom buildings, hardscape, artificial turf, or capped with clean import fill soils 6 inches to 1 foot in thickness that is approved prior to import to the Site.

3.0 REMEDIATION SITE MANAGEMENT

An objective of the SMP is to provide the Site management protocols for handling impacted soil at the Site during the remedial activities to minimize the threat to human health and the environment and the management of NOA containing soils at the Site. Proposed remediation activities will require a licensed contractor, but a hazardous waste contractor (Class A) is not required.

Under California OSHA standard (8 CCR 1592, 8 CCR 5208, and 8 CCR 341.6), excavation, which may involve exposure to NOA is regulated. OSHA training and hazardous materials certification is not required for workers performing the work in the NOA containing soil, however, a 2-hour Asbestos Awareness Training specific to NOA will be performed for the remedial contractor personnel. The training will be performed by a Certified Industrial Hygienist with experience working in NOA environments. The topics will include a description of the material present, potential health hazards from overexposure, exposure routes, and control practices to be in place during the removal.

The areas and depth of soils to be removed are included on Figure 4. The total amount to soil is estimated to be up to approximately 80 cubic yards which includes a conservative 30% additional

excavation that is possible after confirmation sampling of the excavations and additional excavation.

3.1 Site-Specific Health and Safety Worker Requirements

A Site-specific Health and Safety Plan (HSP), included as Appendix D, has been developed to inform personnel of the potential hazards associated with implementing the SMP and to minimize exposure to Site contaminants. Contractors are responsible for the health and safety of their own employees and are required to have their own HSPs and Injury and Illness Prevention Plans (IIPPs) to comply with OSHA. The HSP will be in force at the Site, and the contractors can utilize that HSP as a template to create their company-specific HSP.

The HSPs will provide general health and safety guidance such that field activities can be conducted in a safe manner. Per Cal/OSHA requirements (California Code of Regulations, Title 8), each contractor working at this Site must prepare a health and safety plan that addresses the safety and health hazards during each phase of Site operations that includes the requirements and procedures for employee protection. The HSPs will provide standard operating procedures for personnel involved in activities that may expose them to chemical and physical hazards associated with the removal of impacted soil at the Site. The plan must be kept on-Site during soil removal and loading activities. Prior to conducting work on-Site, project management and field staff must be familiar with the contents of the HSP.

3.2 Pre-Field Activities

Several pre-field activities will be required prior to the initiation of Site activities, as discussed below. The removal activities must be performed by a California-certified contractor.

3.2.1 Permitting

The selected contractors will obtain all applicable permits and notification required for performing soil excavation and off-haul from all the appropriate agencies. There is currently no USEPA identification number for this Site, and this would only need to be obtained if stockpile sampling determines that hazardous waste concentrations were identified in the soil and it will need to be off-hauled and disposed at a Class I Hazardous Waste landfill. If the removal action contractor hired by the District would have to obtain a temporary EPA ID number from the USEPA for the generation, transportation and offsite disposal of soils containing pesticides and metals with hazardous waste concentrations. Based on the concentration detected in the PEA and SSI sampling, this is not anticipated.

An Air Monitoring and Dust Mitigation Plan and a Storm Water Pollution Prevention Plan (SWPPP) are not necessary for the soil excavation activities because the area of work is not greater than 1-acre. The California Health and Safety Code Section 39666(d) provides for controlling emissions

of airborne asbestos, which is administered in the Site area by the Bay Area Air Quality Management District (BAAQMD). Dust control activities and nuisance dust emissions are described and regulated under this authority. An Asbestos Dust Mitigation Plan and permit is required at sites where the NOA concentration exceeds 0.25% and are greater than 1 acre. For this Site, NOA concentrations do exceed 0.25%, but the removal areas ***do not*** exceed one acre and therefore a permit and Asbestos Dust Mitigation Plan (ADMP) are not required with that agency. When the Site grading is performed, an Asbestos Dust Mitigation Plan (ADMP) will be required if the area to be graded is greater than 1-acre.

3.2.2 Utility Clearance

To attempt to locate public underground utilities, the remediation contractor will mark the work area with white spray paint and contact Underground Service Alert (USA) at least 48 hours prior to the initiation of remediation activities.

3.2.3 Work Zones

Work zones will be cordoned off prior to the initiation of Site activities, and ingress and egress from these areas will be controlled. A more detailed discussion of work zones at the Site is presented in Section 2.4.

3.2.4 Support Zone/Staging Area

The support/staging area will be set up on-Site prior to starting operations and will be in a contaminant-free area, such as the existing hardscape areas as shown on Figure 4. This area will provide for administrative and support functions (first-aid station, rest area, drinking facility, equipment recharging facilities, etc.) necessary to keep the field activities running smoothly. The contractor shall provide potable water and wash facilities for the field personnel in this location. The support/staging zone will be established prior to the initiation of removal activities.

3.3 Site Control

Site control is intended to control the potential spread of contamination from the Site including NOA. The affected area will need to be separated from the public by a temporary fencing, to be installed by the remediation contractor. Prior to field activities, the Site will be divided into three zones: exclusion zone, decontamination zone, and support zone. Within the exclusion zone are individual work zones where contaminated material is being excavated, stockpiled, or loaded. Ingress to and egress from Site will be controlled via locking gates. The excavated soil will be stockpiled at the closest available area on plastic sheeting.

3.3.1 Exclusion Zone

The areas where remedial activities will take place and the stockpiling of the contaminated material will be considered the exclusion zone. Ingress to and egress from the exclusion zone will be controlled. Unauthorized individuals will not be allowed within the exclusion zone.

The fencing to be installed along Ave Del Ora will be posted the following notice that reads:

WARNING **CONTAMINATED WORK AREA NO SMOKING OR EATING**	**CAUTION** **Soil at this site may contain naturally occurring asbestos. Avoid creating dust. Breathing high amounts of asbestos dust may cause bodily harm.**	**WARNING** **This Site contains chemicals known to the State of California to cause cancer or other reproductive toxicity.** **AUTHORIZED PERSONNEL ONLY**

3.3.2 Decontamination Areas

Decontamination areas will be established prior to the initiation of chemically-affected soil remediation activities. The decontamination area will be established such that dust, debris, and soil are removed from equipment, transportation vehicles, and personnel leaving the exclusion zone. Decontamination methods during NOA removal for vehicles and equipment will consist of high-pressure washing of trucks, loaders, and any other vehicles that were in the exclusion zone if they come into contact with NOA soils. It is expected that trucks loaded from the contaminated soil stockpiles can be done on pavement thereby preventing contact with NOA soils and washing will not be necessary. A more detailed discussion of decontamination procedures and implementation is presented in Section 3.7.

3.3.3 Support Zone/Staging Area

As described in Section 3.2.4 the support zone/staging area will be established prior to the initiation of removal activities.

3.4 Excavation of Impacted Soil, Site Grading and Capping System

The removal action is estimated to consist of the excavation of up to approximately 80 cubic yards (in-place yardage) of pesticide and metals containing soil and transportation of the material to off-Site disposal facilities. Excavation confirmation sampling requirements are included in Section 3.9. The areas to be excavated are shown on Figure 4. For the arsenic and pesticide removal areas, the initial excavations are estimated to be 2 to 3½ feet deep and include portions

of one side of existing structures and one area on the eastern portion of the Site. The depths of the excavations are estimated and contamination may be present in deeper soils in limited areas. These areas will be determined after the initially planned excavations and confirmation sampling.

The estimated yardage includes a contingency that additional soil (up to 30%) may need to be excavated should some confirmation samples have contaminants that exceed the Site remediation goal concentrations.

Site grading and the construction of the new school building will not take place until after the remedial activities. The NOA impacted soil will be capped with either buildings, hardscape, artificial turf, turf or imported soils. Typical cap systems can be summarized as follows:

- Asphalt areas: 4 inches of asphalt concrete (AC) over 6 to 8 inches of Class II baserock
- Concrete Pads and Walkways: 4 inches concrete over 6 inches Class II aggregate base (AB)
- Utility Pads: 5 inches concrete, 6 inches Class II AB
- Turf Areas: 12 inches clean imported soils
- Buildings: Concrete over a minimum 6 inches of Class II baserock
- Landscaping: 6 inches of import soils in low-traffic areas, 12 inches in high traffic areas

Chemical and NOA-free soil only will be used to cap the native soils. Typically when the DTSC Schools Unit is involved, an indicator material consisting of plastic, bright orange mesh would be used between the native soils and all capping measures to alert workers to the presence of the NOA soils. This material is ideal because it does not degrade, drains easily, and is highly visible. The grading activities will be performed by a California-certified contractor with oversight by a California-registered geologist with experience working in NOA environments.

3.4.1 Construction Equipment

Excavation, soil stockpiling, and loading are the anticipated activities for the soil remediation. Backhoes or mini excavators likely will be used to excavate the soil and rubber-tire loaders used to stockpile and move the material. A water truck and/or on-Site water sources will be used for dust control.

3.4.2 Excavation/Relocation Procedures

The contaminated soils will need to be excavated and temporarily stockpiled on Site for sampling and landfill acceptance profiling before off-haul. Inactive stockpiles will be kept covered with plastic sheeting and anchored at all times except when the soil is actively being added or removed. Stockpiling will take place on plastic at the closest, convenient locations to the excavations.

The approximate limits and depths of the excavation areas necessary to remove the impacted soil with concentrations exceeding the regulatory thresholds are presented on Figure 3. The final excavation dimensions may be larger or deeper if the confirmation sampling results indicate that additional soil excavation is needed to reach the Site remedial goals. The arsenic and pesticide impacted soils will be stockpiled and resampled for landfill review and acceptance, or direct loaded if the landfill will accept the previous sampling.

Following excavation of the pesticide and metals impacted soils confirmation soil samples will be collected from the sidewalls and the bottom of the excavations to evaluate if sufficient impacted soil has been removed. Excavation activities will be considered complete when the confirmation samples collected from the remaining in-place soil do not contain COC concentrations that exceed the respective remedial goals, as discussed in Section 2.5. Confirmation sampling is described in more detail in Section 3.9.

3.4.3 Stockpile Profiling

If soils cannot be direct loaded, the stockpiles of excavated soils will be sampled for landfill profiling purposes and to accumulate a sufficient quantity of soil to avoid truck standby and partial loads. To profile the material for off-Site disposal, composite soil samples will be collected from the stockpiled soil and analyzed prior to landfill acceptance. The sampling frequency and analyses will vary by disposal facility. Stockpile soil sample collection and laboratory analysis will be performed by MCI. Solubility and leaching testing during the stockpile profile sampling may cause the analytical results to be received as much as 5 days from the collection of the samples. If any contaminants exceed hazardous waste threshold concentrations, the soil will need to be disposed at a Class I hazardous waste landfill, or possibly out of state as a non-hazardous waste if it can be done at a lesser cost. It is not anticipated that hazardous waste will be identified due to previous sampling results. NOA is exempt from hazardous waste designation and will therefore not be disposed as a hazardous waste. In no case will the soils be reused at a different site. Soils must be disposed at a licensed landfill in California.

3.4.4 Truck Loading Procedures

Once the soil is approved for landfill disposal, the truck loading will be carefully done and supervised such that minimal spillage occurs during loading and trucks do not come into contact with the impacted soils. As an added measure of protection, heavy plastic sheeting will be placed beneath the trucks to collect any spilled soil. Any spilled soil will be immediately removed and placed back into the truck trailer to avoid the spreading of impacted soil onto the truck tires which could result in track-out of contaminated soils.

3.4.5 Transportation Procedures

This section outlines the requirements and procedures for transportation of the excavated soil to an off-Site disposal facility (Class I hazardous waste landfill, a Class II or III non-hazardous waste landfill). The appropriate disposal facility will be determined based on the results of the stockpile soil profiling.

It is anticipated that large end-dump trucks will be used which hold 10-12 cubic yards of soil depending on the weight of the material. Although not anticipated, any potential Class I material would need to be hauled and disposed separately from Class II or Class III soils.

The soil will be transported by an appropriately-licensed transporter. The necessary documents, such as the bills of lading and/or waste manifest forms, will be completed and accompany the truck driver to the landfill. The trucks will be loaded at the Site and appropriately covered (tarped) in accordance with Department of Transportation (DOT) regulations. The loads will be wetted to minimize dust generation and covered with a tarp before leaving the Site.

3.5 Dust and Erosion Control

Site control procedures will be established to control the potential generation of dust and exposure to workers and Site neighbors. These controls include a variety of dust control methods and practices designed to minimize the generation and spread of dust that could contain asbestos fibers. A water truck or other source of water will be used to deliver water to the Site for dust control purposes. Experience at similar sites in the area has shown that if good dust control is maintained, asbestos emissions can be kept below action levels.

Air monitoring will be conducted to control dust emissions during Site remedial activities. The dust control measures are outlined below and will be followed at all times during work in NOA-containing soil.

These conditions include but are not limited to the following:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas and unpaved access roads) shall be watered at least twice daily.
- All haul trucks transporting soil, sand, and other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speed on unpaved roads shall be limited to 5 miles per hour.

3.5.1 Disturbed Surfaces and Stockpile Control Measures

During site activities, disturbed soil surfaces with NOA will be kept adequately wetted to control dust generation. This includes the removal activities conducted around the existing buildings. Areas of exposed soils will be wetted at least daily or more to inhibit dust generation. Areas of exposed NOA will be minimized by placing indicator material over segments and backfilled with imported soils or construction material as soon as practical. If NOA impacted soil is stockpiled, it will be covered with visqueen, anchored, and uncovered only during movement of the soil. For the pesticide and metals-impacted soil, the excavated soil will be placed on visqueen, covered with visqueen at the end of the day, anchored, and uncovered only during movement of the soil. These stockpiles will be sampled for landfill characterization and once characterized, will be loaded and off-hauled to the appropriate Class II or III facility.

3.5.2 Control for Earthmoving Activities

In addition to the conditions above, during soil removal/relocation activities, the ground will be pre-wetted prior to excavation. The relocation operations will be suspended when wind speeds are great enough to result in dust emissions from the point-of-origin or crossing the exclusion zone boundary, despite the application of dust control mitigation measures. Drop heights will be minimized during the excavation of the soil and the loading of the haul trucks to minimize the creation and dispersion of dust.

3.6 Air Monitoring

Air monitoring will be performed on both on-Site personnel and along the perimeter of the Site to evaluate the effectiveness of the dust control measures at minimizing the release of asbestos fibers. Samples collected for asbestos fiber counts will be submitted to Asbestos TEM Laboratory which is an Environmental Protection Agency – National Institute of Standards for Testing (EPA-NIST) accredited laboratory that maintains proficiency in the American Industrial Hygiene Proficiency Analytical Testing (PAT) Program, and participates in the National Voluntary Laboratory Accreditation Program (NVLAP), for analysis. Details of the air monitoring trigger and action levels are summarized in the table below. All sample collection and lab results data will be reviewed by a Certified Industrial Hygienist (within 36 hours of collection) who is familiar with NOA dust monitoring procedures and the exposure limits identified in this SMP.

Air Monitoring Summary

Air Monitoring	Location	Trigger Level (increase dust mitigation)	Action Level (stop work)
Asbestos	Perimeter (fenceline)	0.005 structures/cc (TEM)	0.01 structures/cc (TEM)
	Work Zone (8 hr TWA)	0.05 fibers/cc	0.1 fibers/cc (OSHA PEL)
	Work Zone (Excursion 30 Min)	0.5 fibers/cc	1 fibers/cc
Total Dust[1] (PM10)	Perimeter (fenceline)	"no visible dust"	0.05 mg/m^3

1 – Based on the California Ambient Air Quality Standards (CAAQS) for PM_{10} dust standard, upwind vs. downwind samples (24 hour average).

If the Site-Specific Trigger Level is reached or exceeded, dust control measures must be increased until the Site-Specific Trigger Level can be achieved. If the Site cannot be reliably controlled, or if the Action Level is reached or exceeded, all work will be stopped. If the Action Levels are exceeded, the District project manager will be notified immediately.

3.6.1 Perimeter Air Monitoring

Perimeter air monitoring will be performed to document the effectiveness of dust control measures and to evaluate the potential off-Site migration of asbestos during grading activities. On each day of monitoring, samples will be collected at one upwind and two downwind locations along the perimeter of the Site and submitted for laboratory analysis for asbestos fibers. The sampling locations will be determined based on the daily prevailing wind direction observed at the Site. The wind direction will be monitored throughout the day via a wind station and if the prevailing wind direction changes, the perimeter monitoring stations will be adjusted accordingly. The upwind samples will be collected to evaluate the ambient concentrations of asbestos in the air coming onto the Site, and the downwind samples will be collected to evaluate if off-Site migration of asbestos has occurred. The samples generally will be collected over entire workdays when soil disturbing activities are underway. The perimeter air samples will be submitted to the laboratory, for asbestos analysis by Transmission Electron Microscopy (TEM) using EPA Asbestos Hazard Emergency Response Act (AHERA) criteria with an analytical sensitivity of 0.001 fibers per cubic centimeter on a rush 24-hour basis. All asbestos structures greater than 0.5 micrometers in length with an aspect ratio greater than 3:1 will be counted. The table above summarizes the trigger levels and action levels that the results from the work zone will be compared to.

Total dust levels will also be monitored at the Site perimeter with a continuous reading meter on at least an hourly basis as an indicator of adequate dust control. The table above summarizes the trigger and action levels that the results from the perimeter will be compared to.

The monitoring also will consist of visual observations of grading activities. If dust is observed leaving the Site, or asbestos fibers are detected leaving the Site in excess of the trigger levels (greater downwind concentrations than upwind concentrations), increased dust control measures will be implemented. If these measures are not effective because of conditions such as high winds, work will be stopped until winds subside.

Due to the close proximity of the Site to the existing school and to adjacent residential areas, and at the request of DTSC, perimeter monitoring will be performed every day NOA-impacted soils are disturbed (e.g., grading, and soil excavation and soil removal activities).

3.6.2 Quality Assurance/Quality Control

Battery-operated air pumps will be used to collect the air samples. Pump calibration will be performed with a field rotameter (secondary standard) that has been previously calibrated with a primary standard. The airflow will be calibrated prior to and at the conclusion of the sampling period. Chain of custody forms will include the unique sample identification assigned to each sample, location and activity of the sample, calibration flow rates before and following the sampling period, average flow rates, time of sample period, and total volume. A detailed description of the air monitoring protocol is included in Appendix E.

3.6.3 Monitoring Equipment

Total dust levels will be monitored with real-time particulate monitoring equipment. The monitoring will be done at the perimeter upwind and two downwind locations at least every hour during the first day of each new field activity to determine if excessive dust migration is occurring off-Site. The particulate meter records and stores measured particulate concentrations that can be downloaded and printed. These records will be kept along with the weather conditions each day and the prevailing wind directions throughout the day. Copies of the records will be submitted with the Removal Action Completion Report.

3.7 Decontamination

Decontamination procedures will be followed before equipment or personnel exit the exclusion zone as part of general protocols for preventing or reducing the physical transfer of impacted materials from the affected areas. The following sections discuss decontamination zones, and decontamination procedures.

3.7.1 Equipment Decontamination and Track-Out Controls

Decontamination procedures for equipment will utilize wet methods such as pressure washing after the excavation of the impacted soils. The heavy equipment buckets used during the excavation and loading of the impacted soils can be cleaned by pressure washing over the stockpiled impacted soils to avoid generation of rinse water.

As previously described, truck loading will be carefully done and supervised such that minimal spillage occurs during loading and trucks do not come into contact with the impacted soils. As an added measure of protection, heavy plastic sheeting will be placed beneath the trucks to collect any spilled soil. Any spilled soil will be immediately removed to avoid the spreading of impacted soil on the truck tires. It is anticipated that no additional decontamination procedures will be necessary based on the above precautions and the limited number of trucks necessary for off-haul of the soils.

3.7.2 Worker Protection and Decontamination

Protective Tyvek suites, rubber boots and chemically resistant gloves will be required for personnel who could contact affected soils because some of the contaminate concentrations exceed worker safety levels. This clothing will need to be removed and properly disposed in the designated exit corridors leading to the support zone. The location and size of the decontamination corridors for personnel may change as Site conditions and operations dictate. Personnel will remove Tyvek suites and nitrile gloves and rinse their boots and wash their hands when exiting the work area for any reason. Disposable equipment intended for one-time use will not be decontaminated but will be bagged for appropriate disposal. Reusable equipment, such as shovels, can be rinsed over contaminated soil stockpiles.

3.8 Field Documentation

3.8.1 Field Oversight and Reporting

A MCI field engineer will be present on-Site on an as-needed basis during the chemically-affected soil excavation, perimeter dust monitoring and handling activities. This individual will monitor the soil excavation work, collect confirmation soil samples, perimeter air monitoring and collect stockpile soil samples. As part of this process, a field log will be used to document Site activities and a scaled Site map will be used to document the removal areas and confirmation sampling locations.

3.8.2 Photographs

Photographs of Site activities will be taken periodically by MCI to further document the removal action implementation. The photographs will be made available for inspection by authorized personnel for the duration of the project and included in the Removal Action Completion Report.

3.9 Confirmation Soil Sampling

To document adequate removal of soil with the COCs concentrations that exceed the Site remedial goals, confirmation soil samples will be collected from the bottom and sidewalls in the excavation areas. The base confirmation samples will be collected at an approximate frequency of one sample for every approximately 250 square feet with a minimum of one bottom sample per excavation area. The sidewall confirmation samples will be collected at an approximate frequency of one sample for every approximately 40 lineal feet of excavation sidewall, with a minimum of one sample per sidewall. Duplicate samples will also be collected at a rate of one sample for every 20 samples for Quality Assurance/Quality Control.

3.9.1 Confirmation Soil Sample Locations and Depths

The confirmation sample locations will be randomly selected in the base and sidewalls of the excavations in accordance with the above-mentioned frequencies. The samples will generally be collected from the outer or upper 6 inches of soils present in the sidewall or base.

3.9.2 Soil Sampling Procedure

Soil samples will be obtained by manually scraping new, disposable, laboratory supplied 4-ounce glass jars or 9-ounce glass jars into freshly exposed soil in the bottom and the sidewalls of the excavations. After sample collection, the Teflon-lined lid will be securely fastened on the jar and the jar will be labeled with a unique sample identification number. New gloves will be worn by the sampling personnel and will be changed between sampling locations and discarded. The samples will then be placed in an insulated cooler chilled to 4 degrees +/- 2 degrees Celsius and hand delivered by MCI personnel to Torrent Laboratory in Milpitas or Pace Analytical personnel to be shipped via Fed-Ex to their facility. Both Torrent Laboratory and Pace Analytical are California-certified analytical laboratory.

It is anticipated that no sampling equipment will need to be reused, and therefore no decontamination of sampling equipment will be needed. Should hard soils be encountered cannot be scraped to collect a sample, as pick or trowel may have to be used. Such tools would be cleaned thoroughly between uses with liquinox and water followed by a water rinse.

3.9.3 Laboratory Analyses

All soil analyses would be performed on an accelerated response time to attempt to reduce project delays. The analyses for metals will take up to 3 days to receive results because of soil digestion procedures. An additional 2 days would be needed to test stockpile soils for soluble lead should that be necessary. Although the samples will be analyzed on an accelerated response time, the contractor should anticipate results to take about 72 hours from the day of collection. The landfill(s) may also require additional testing that is difficult to anticipate but could result in additional time.

3.9.4 Additional Excavation and Confirmation Sampling

If concentrations of the contaminants are detected exceeding their Site remedial goals additional excavation will be performed. In removal areas where chlordane is the COC, additional excavations will only be performed on the areas that exceed the 0.44 mg/kg. In removal areas where arsenic is the COC, additional excavations will only be performed in areas that exceed the maximum naturally-occurring concentration of 8.0 mg/kg.

If a base excavation sample exceeds the cleanup goal, an additional 1 foot of soil will be excavated from that area. Similarly, if a sidewall sample exceeds the cleanup remedial goals, the excavation will be extended an additional 2 feet into the sidewall along the length of the sidewall. This process will be repeated as necessary. Additional samples would be collected at the same locations after the additional removal is done.

4.0 IMPORT SOIL EVALUATION

For landscaped areas and natural turf area, a cap of clean soil will need to be placed over the natural soils, as described in Section 3.4. This soil will be imported from off-site sources. To minimize the potential introduction of contaminated fill onto the Site, all possible sources of import fill must have adequate documentation so it can be verified that the fill source is appropriate for the Site. Documentation should include detailed information on the previous land use of the fill source, any environmental site assessments performed and the findings, and the results of any testing performed. If no documentation is available or the documentation is inadequate, samples of the potential fill material will be collected and chemically analyzed. The analyses selected will be based on the fill source and knowledge of the previous land use. The analyses selected will be based on the fill source and knowledge of the previous land use. The project environmental consultant MCI would perform this review of potential soil import sources. The lab analyses and sampling frequency for potential fill material will be in accordance with that outlined in the DTSC *Information Advisory on Clean Imported Fill Material*, dated October 2001, included in Appendix F. If the import material is from an area within 10 miles of ultramafic rock, then the soil will also be tested for NOA using EPA Bulk TEM methods with a detection limit of 0.001% by weight or less.

5.0 REMEDIATION COMPLETION REPORT

A remediation completion report will be prepared after the remediation activities have been completed, and will include the following elements:

- Figures showing Site features and confirmation sample locations, extent of excavation and summary results;

- Tables summarizing the analytical results and comparison to applicable standards;
- Laboratory reports and chain of custody documentation;
- Documentation and testing results of import soils;
- Field logs and air monitoring reports;
- Discussion of the Site excavation, stockpile, and activities; and,
- Waste disposal truck manifests.

6.0 LIMITATIONS

This Soil Management Plan (SMP) was prepared for the use of the Redwood City Unified School District in evaluating the proposed remedial action. We make no warranty, expressed or implied, except that our services have been performed in accordance with environmental principles generally accepted at this time and location. The chemical and other data presented in this report can change over time and are applicable only to the time this SMP was prepared.

7.0 REFERENCES

Bradford, G.R., Chang, A.C., Page, A.L., Bakhtar, D., Frampton, J.A., Wright, H. March 1996, *Background Concentrations of Trace and Major Elements in California Soils.* Kearney Foundation of Soil Science

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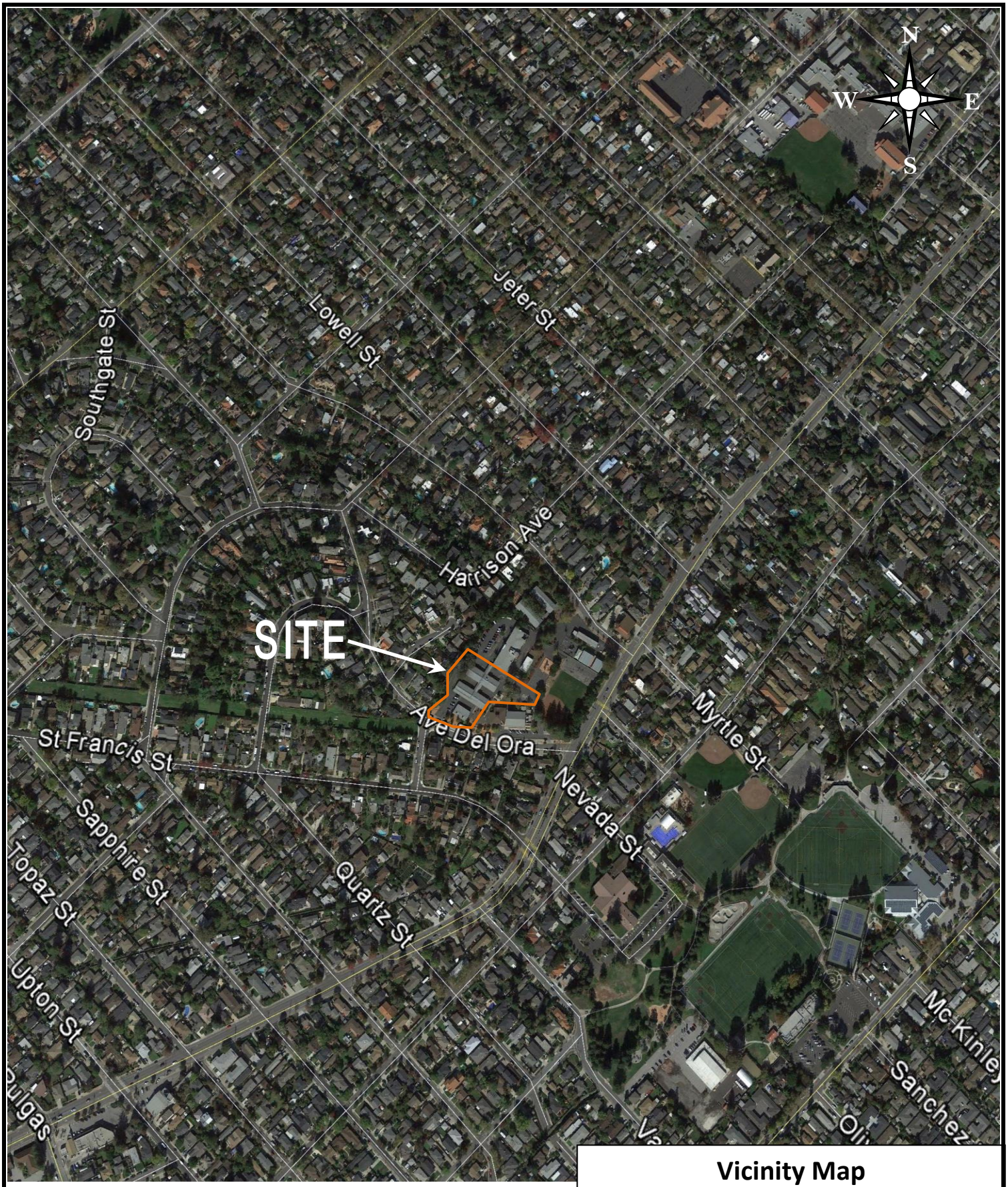
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United States Environmental Protection Agency Regional Screening Levels, May 2018.

FIGURES



Vicinity Map

John Gill School Expansion
555 Avenue Del Ora
Redwood City, California

FIGURE 1

McCloskey Consultants



BP-2	Percent (%)
Sample Depth	2-2½'
NOA	**0.014%**

BP-7	Percent (%)	
Sample Depth	1½-2'	2-2½'
NOA	**0.029%**	**0.60%**

BP-12					
Step-Out (Feet)	0'	0'	0'	5'	5'
Sample Depth	½-1'	2-2½'	3-3½'	½-1'	2-2½'
Chlordane	0.153	**1.57**	<0.224	<0.231	<0.225

BP-13				
Step-Out (Feet)	0'	0'	0'	5'
Sample Depth	1-1½'	2-2½'	3-3½'	½-1'
Cobalt	**32.9**	**30.1**	15.6	14.1

BP-13	Percent (%)
Sample Depth	2-2½'
NOA	**0.026%**

BP-9								
Step-Out (feet)	0'	0'	5'	5'	5'	10'	10'	10'
Sample Depth	½-1'	2-2½'	½-1'	2-2½'	3-3½'	½-1'	2-2½'	3-3½
Arsenic	**30.6**	5.76	**13.5**	6.07	3.82	1.51	1.94	<2.12

FB-1							
Step-Out (feet)	0'	0'	0'	5' North	5' East	5' South	5' West
Sample Depth	1-2'	2½-3'	3½-4'	1-2'	1-2'	1-2'	1-2'
Arsenic	**10.9**	**13.6**	<2.24	4.13	2.04	2.04	<2.12

LEGEND:

- Approximate Parcel Boundary
- Approximate Site Boundary
- Building Perimeter – Unpaved Sampling Locations
- Building Perimeter – Paved Sampling Locations
- Historical Structure Sampling Location
- Newer Fill Sampling Location
- Approximate Locations of Historical Structures

Approximate Graphical Scale (Ft.)

0 60 120

Notes:

Bold – Indicates Exceedance of Regulatory Thresholds or Naturally-Occurring Background Concentrations

All Concentrations in milligram per kilogram (mg/Kg)

Site Plan

PEA Sampling Locations & Select Results

John Gill School Expansion
555 Avenue Del Ora
Redwood City, California

FIGURE 2

McCloskey Consultants



BP-2	Percent (%)
Sample Depth	2-2½'
NOA	**0.014%**

BP-7	Percent (%)	
Sample Depth	1½-2'	2-2½'
NOA	**0.029%**	**0.60%**

BP-12					
Step-Out (Feet)	0'	0'	0'	5'	5'
Sample Depth	½-1'	2-2½'	3-3½'	½-1'	2-2½'
Chlordane	0.153	**1.57**	<0.224	<0.231	<0.225

BP-13				
Step-Out (Feet)	0'	0'	0'	5'
Sample Depth	1-1½'	2-2½'	3-3½'	½-1'
Cobalt	**32.9**	**30.1**	15.6	14.1

BP-13	Percent (%)
Sample Depth	2-2½'
NOA	**0.026%**

BP-9								
Step-Out (feet)	0'	0'	5'	5'	5'	10'	10'	10'
Sample Depth	½-1'	2-2½'	½-1'	2-2½'	3-3½'	½-1'	2-2½'	3-3½
Arsenic	**30.6**	5.76	**13.5**	6.07	3.82	1.51	1.94	<2.12

FB-1							
Step-Out (feet)	0'	0'	0'	5' North	5' East	5' South	5' West
Sample Depth	1-2'	2½-3'	3½-4'	1-2'	1-2'	1-2'	1-2'
Arsenic	**10.9**	**13.6**	<2.24	4.13	2.04	2.04	<2.12

LEGEND:

- Approximate Parcel Boundary
- Approximate Site Boundary
- Building Perimeter – Unpaved Sampling Locations
- Building Perimeter – Paved Sampling Locations
- Historical Structure Sampling Location
- Newer Fill Sampling Location
- Approximate Locations 2 foot Removal Area
- Approximate Locations 3 foot Removal Area
- Approximate Locations 3.5 foot Removal Area

Approximate Graphical Scale (Ft.)

0 60 120

Notes:

Bold – Indicates Exceedance of Regulatory Thresholds or Naturally-Occurring Background Concentrations

All Concentrations in milligram per kilogram (mg/Kg)

Site Plan

Removal Areas

John Gill School Expansion
555 Avenue Del Ora
Redwood City, California

FIGURE 3

McCloskey Consultants



Site Control Plan

Soil Management Plan

John Gill School Expansion
555 Avenue Del Ora
Redwood City, California

FIGURE 4

McCloskey Consultants

Appendix A

DTSC PEA Workplan Approval Letter

Department of Toxic Substances Control

Barbara A. Lee, Director
8800 Cal Center Drive
Sacramento, California 95826-3200

Matthew Rodriquez
Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

April 10, 2018

Mr. Donald Dias
Bond Program Director
Redwood City School District
750 Bradford Street
Redwood City, California 94063

APPROVAL OF PRELIMINARY ENVIRONMENTAL ASSESSMENT WORKPLAN, REDWOOD CITY SCHOOL DISTRICT, REDWOOD CITY SD – JOHN GILL SCHOOL, 555 AVENUE DEL ORA, REDWOOD CITY, SAN MATEO COUNTY (PROJECT CODE 204295)

Dear Mr. Dias:

The Department of Toxic Substances Control (DTSC) reviewed the revised *Preliminary Environmental Assessment Workplan* (PEA Workplan – McCloskey Consultants, Inc., March 30, 2018) received electronically on April 9, 2018. The PEA Workplan was revised in response to DTSC comments on the draft version forwarded in a letter dated March 1, 2018 and a follow-up email dated April 2, 2018. The PEA Workplan includes project background information as well as proposed investigation activities.

According to the PEA Workplan, the proposed approximately 1.2-acre renovation/redevelopment area is an irregularly-shaped area within the existing John Gill School located at 555 Avenue Del Ora in Redwood City, San Mateo County, California (Site). The Site is located on the southern portion of the parcel identified as San Mateo County Assessor's Parcel Number 058-161-390 (approximately 6.9 acres). The Site is bounded by non-Site portions of the John Gill School on the north and east, Avenue Del Oro on the south, and Eagle Hill Terrace on the west.

The Redwood City School District's (District) redevelopment plans include the demolition of: a portable building, an existing elevator building and two permanent classroom buildings; as well as the construction of: a new two-story classroom building in place of the existing buildings and a new lunch shelter east of the existing elevator building. Additionally, the driveway entrance to the school from Avenue Del Ora will be reconfigured and the parking spaces relocated. The redevelopment project will consist

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of four additional classrooms with an expected increase in student population of approximately 100 students.

The PEA Workplan includes activities to investigate for the potential presence of the following:

- Lead from weathering of lead-based paint from current and former buildings;
- Organochlorine pesticides (OCPs) associated with termiticide use around building foundations with wood components and/or ant control;
- Arsenic associated with herbicide use to control weeds;
- Polychlorinated biphenyls (PCBs) from window caulking in older buildings;
- Naturally occurring asbestos (NOA) due to the Site being located within two miles of ultramafic rock formations that potentially contain NOA; and
- CAM 17 Metals, OCPs, PCBs, NOA, semi-volatile organic compounds and polycyclic aromatic hydrocarbons from the undocumented fill.

DTSC comments have been adequately addressed and the revised PEA Workplan is hereby approved. If site conditions differ from those presented in the approved PEA Workplan, additional work may be necessary. In accordance with Education Code section 17210.1 (b), the District must provide written notice to residents and businesses in the immediate area, approved in form by DTSC, no less than three to five days in advance of field investigation activities. The intent of this requirement is to provide advance notice of fieldwork such as drilling, sampling, and other environmental data collection activities at the Site to anyone who lives or works in the line of sight. Please notify DTSC a minimum of 48 hours in advance of field work or schedule changes.

The PEA Workplan indicates that the District is intending to make the Draft PEA Report available for public review by Option B of the Education Code section 17213.1(a)(6)(B). Pursuant to Education Code section 17213.1, subdivision (a)(6), at the same time the Draft PEA Report is submitted to DTSC, the District shall publish a DTSC approved notice in a local newspaper of general circulation and post the notice in a prominent manner at the proposed construction location. The notice should state the District's intent of making the PEA Report available for public review by Option B. A copy of the notice shall be submitted to DTSC with the Draft PEA Report.

If you have any questions regarding the project, please contact me at (916) 255-6527 or via email at Mellan.Songco@dtsc.ca.gov.

Sincerely,

Mellan Songco, MPA, Project Manager
DTSC Northern California Schools Unit
Site Mitigation and Restoration Program

cc: (via email)

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Appendix B

PEA and SSI Summary Results Tables & Laboratory Analytical Results

Table 1. Summary of Metals Detected in Soil Samples
Preliminary Environmental Assessment & SSI Sampling
John Gill Elementary School
Redwood City, California

Location	Sample ID	Sample Depth (feet bgs)	Date Sampled	Antimony	Arsenic	Barium	Beryllium	Cadmium	Total Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
(Concentrations in milligrams per kilogram [mg/Kg])																				
Building Perimeters	BP-1 0.5-1	0.5-1'	4/12/2018	--	**2.26**	--	--	--	--	--	--	**2.57**	--	--	--	--	--	--	--	--
	BP-1 2-2.5	2-2.5'	4/12/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-2 0.5-1	0.5-1'	4/12/2018	--	**2.16J**	--	--	--	--	--	--	**3.76**	--	--	--	--	--	--	--	--
	BP-2 1-1.5	1-1.5'	4/12/2018	<11.5	**6.23J**	**210**	<1.15	<2.86	**139**	**20.8**	**54.0**	<2.86	**0.0441**	<2.86	**247**	<11.5	<5.73	<11.5	**235**	**88.4**
	BP-2 2-2.5	2-2.5'	4/12/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-3 0.5-1	0.5-1'	4/13/2018	--	**4.56**	--	--	--	--	--	--	**10.7**	--	--	--	--	--	--	--	--
	BP-3 2-2.5	2-2.5'	4/13/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-4 0.5-1	0.5-1'	4/13/2018	--	**5.79**	--	--	--	--	--	--	**11.5**	--	--	--	--	--	--	--	--
	BP-4 2-2.5	2-2.5	4/13/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-5 0.5-1	0.5-1'	4/13/2018	--	**4.94**	--	--	--	--	--	--	**24.3**	--	--	--	--	--	--	--	--
	BP-5 1-1.5	1-1.5'	4/13/2018	**1.16J**	**7.16**	**167**	**0.752**	**0.145J**	**36.3**	**9.56**	**30.4**	**14.1**	**0.0619**	**0.236J**	**53.7**	<2.12	<1.06	<2.12	**52.7**	**66.1**
	BP-5 2-2.5	2-2.5'	4/13/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-6 0.5-1	0.5-1'	4/13/2018	--	**6.51**	--	--	--	--	--	--	**14.2**	--	--	--	--	--	--	--	--
	BP-6 2-2.5	2-2.5	4/13/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-7 0.5-1	0.5-1'	4/13/2018	--	**4.93**	--	--	--	--	--	--	**4.37**	--	--	--	--	--	--	--	--
	BP-7 2-2.5	2-2.5'	4/13/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-8 0.5-1	0.5-1'	4/13/2018	--	**6.85**	--	--	--	--	--	--	**10.2**	--	--	--	--	--	--	--	--
	BP-8 2-2.5	2-2.5	4/13/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-9 0.5-1	0.5-1'	4/13/2018	--	**30.6**	--	--	--	--	--	--	**10.4**	--	--	--	--	--	--	--	--
	BP-9 2-2.5	2-2.5'	9/15/2018	--	**5.76**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-9 @5'S.O.	0.5-1'	9/15/2018	--	**13.5**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-9 @5'S.O.	2-2.5'	9/15/2018	--	**6.07**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-9 @5'S.O.	3-3.5'	9/15/2018	--	**3.82**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-9 @10'S.O.	0.5-1'	9/15/2018	--	**1.51**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-9 @10'S.O.	2-2.5'	9/15/2018	--	**1.94**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-9 @10'S.O.	3-3.5'	9/15/2018	--	<2.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-10 0.5-1	0.5-1'	4/13/2018	--	**2.32**	--	--	--	--	--	--	**7.05**	--	--	--	--	--	--	--	--
	BP-10 1-1.5	1-1.5'	4/13/2018	**1.39J**	**4.99**	**175**	**0.502**	**0.177J**	**80.3**	**18.4**	**33.8**	**10.4**	**0.0585**	**0.714**	**109**	<2.15	<1.08	<2.15	**66.7**	**55.7**
	BP-10 2-2.5	2-2.5'	4/13/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-11 0.5-1	0.5-1'	4/13/2018	--	**5.39**	--	--	--	--	--	--	**10**	--	--	--	--	--	--	--	--
	BP-11 2-2.5	2-2.5'	4/13/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-12 0.5-1	0.5-1'	4/13/2018	--	<2.21	--	--	--	--	--	--	<0.553	--	--	--	--	--	--	--	--
	BP-12 2-2.5	2-2.5	4/13/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Portable Classoom/ Art Structure	BP-13 0.5-1	0.5-1'	4/12/2018	--	**7.77**	--	--	--	--	--	--	**5.06**	--	--	--	--	--	--	--	--
	BP-13 1-1.5	1-1.5'	4/12/2018	**2.44**	**3.87**	**216**	**0.561**	**0.114J**	**158**	**32.9**	**51.9**	**3.74**	**0.0488**	<0.581	**225**	<2.33	<1.16	<2.33	**114**	**59.8**
	BP-13 2-2.5	2-2.5'	9/15/2018	--	--	--	--	--	--	**30.1**	--	--	--	--	--	--	--	--	--	--
	BP-13	3.3.5'	9/15/2018	--	--	--	--	--	--	**15.6**	--	--	--	--	--	--	--	--	--	--
	BP-13@5'S.O.	0.5-1'	9/15/2018	--	--	--	--	--	--	**14.1**	--	--	--	--	--	--	--	--	--	--
	BP-14 0-0.5	0-0.5'	4/12/2018	--	--	--	--	--	--	--	--	**14.4**	--	--	--	--	--	--	--	--
	BP-15 0.5-1	0.5-1'	4/12/2018	--	**4.10**	--	--	--	--	--	--	**6.14**	--	--	--	--	--	--	--	--
	BP-15 2-2.5	2-2.5	4/12/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-16 0-0.5	0-0.5'	4/12/2018	--	**6.03**	--	--	--	--	--	--	**6.18**	--	--	--	--	--	--	--	--
	BP-16 2-2.5	2-2.5'	4/12/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Building Perimeter	BP-17 0-0.5	0-0.5'	4/13/2018	--	**5.25**	--	--	--	--	--	--	**6.72**	--	--	--	--	--	--	--	--
	BP-17 2-2.5	2-2.5	4/13/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Historical Structures	HS-1 0-0.5	0.5-1'	4/12/2018	--	**2.93**	--	--	--	--	--	--	**10.2**	--	--	--	--	--	--	--	--
	HS-1 2-2.5	2-2.5	4/12/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	HS-2 0-0.5	0.5-1'	4/12/2018	--	**4.05**	--	--	--	--	--	--	**8.27**	--	--	--	--	--	--	--	--
	HS-2 2-2.5	2-2.5'	4/12/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Newer Fill	FB-1 1-2	1-2'	4/12/2018	1.60J	**10.9**	**167**	**0.755**	**0.115J**	**33.3**	**18.6**	**39.3**	**11.2**	**0.0475**	**0.287J**	**50.0**	<2.12	<1.06	<2.12	**52.8**	**70.5**
	FB-1	2.5-3'	9/15/2018	--	**13.6**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	FB-1	3.5-4'	9/15/2018	--	<2.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	FB-1N @5' S.O.	1-2'	9/15/2018	--	**4.13**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	FB-1E @5' S.O.	1-2'	9/15/2018	--	**2.04**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	FB-1W @5' S.O.	1-2'	9/15/2018	--	<2.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	FB-1S @5' S.O.	1-2'	9/15/2018	--	**2.04**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
USEPA RSL				**31**	**0.68***	**15,000**	**160**	**71**	**120,000**	**23**	**3,100**	**400**	**11**	**390**	**1,500**	**390**	**390**	**0.78****	**390**	**23,000**
HHRA HERO Note 3				**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**80**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

Notes:
CAM 17 metals, arsenic, and lead analyzed using U.S. EPA Method 6010B; EPA Method 7471A (mercury).

bgs	Below ground surface.	USEPA RSL	United States Environmental Protection Agency Regional Screening Levels for Residential Uses (May 2018).
<RDL	Indicates compound was not detected at or above stated laboratory reported detection limits.	HERO HHRA Note 3	DTSC Human and Ecological Risk Office (HERO) Human Health Risk Assessment (HHRA) Note 3, DTSC-Modified Screening Levels, January 2018.
--	Indicates sample not analyzed.		Indicates concentration exceeds one or more regulatory screening level.
NA	Not applicable.	J	Estimated concentration. See laboratory analytical reports for other lab qualifiers.
*	Cal/EPA does not require cleanup of soil to less than background concentrations. Natural background concentrations of arsenic often exceed the health-based goals in soil. The calculated maximum natural background concentration is approximately 8.0 mg/Kg		
**	The USEPA RSL for Thallium (Soluble Salts)		

Table 2. Summary of Polychlorinated Biphenyls Detected in Soil Samples

Preliminary Environmental Assessment

John Gill Elementary School

Redwood City, California

Location	Sample ID	Sample Depth (feet bgs)	Date Sampled	PCB 1016	PCB 1221	PCB 1232	PCB 1242	PCB 1248	PCB 1254	PCB 1260
(Concentrations in milligrams per kilogram [mg/Kg])										
Building Perimeter	BP-1 0.5-1	0.5-1'	4/12/2018	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189	<0.0189
	BP-1 2-2.5	2-2.5'	4/12/2018	--	--	--	--	--	--	--
	BP-2 0.5-1	0.5-1'	4/12/2018	<0.0201	<0.0201	<0.0201	<0.0201	<0.0201	<0.0201	<0.0201
	BP-2 1-1.5	1-1.5'	4/12/2018	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195	<0.0195
	BP-2 2-2.5	2-2.5'	4/12/2018	--	--	--	--	--	--	--
	BP-3 0.5-1	0.5-1'	4/13/2018	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182
	BP-3 2-2.5	2-2.5'	4/13/2018	--	--	--	--	--	--	--
	BP-4 0.5-1	0.5-1'	4/13/2018	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182
	BP-4 2-2.5	2-2.5	4/13/2018	--	--	--	--	--	--	--
	BP-5 0.5-1	0.5-1'	4/13/2018	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182	<0.0182
	BP-5 1-1.5	1-1.5'	4/13/2018	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180
	BP-5 2-2.5	2-2.5'	4/13/2018	--	--	--	--	--	--	--
	BP-6 0.5-1	0.5-1'	4/21/2018	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193	<0.0193
	BP-6 2-2.5	2-2.5	4/13/2018	--	--	--	--	--	--	--
	BP-7 0.5-1	0.5-1'	4/13/2018	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200
	BP-7 2-2.5	2-2.5'	4/13/2018	--	--	--	--	--	--	--
	BP-8 0.5-1	0.5-1'	4/13/2018	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196
	BP-8 2-2.5	2-2.5	4/13/2018	--	--	--	--	--	--	--
	BP-9 0.5-1	0.5-1'	4/13/2018	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203	<0.0203
	BP-9 2-2.5	2-2.5'	4/13/2018	--	--	--	--	--	--	--
	BP-10 0.5-1	0.5-1'	4/13/2018	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181	<0.0181
	BP-10 1-1.5	1-1.5'	4/13/2018	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	<0.0183	**0.00684J**
Building Perimeter	BP-10 2-2.5	2-2.5'	4/13/2018	--	--	--	--	--	--	--
	BP-11 0.5-1	0.5-1'	4/13/2018	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185	<0.0185
	BP-11 2-2.5	2-2.5'	4/13/2018	--	--	--	--	--	--	--
	BP-12 0.5-1	0.5-1'	4/13/2018	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188	<0.0188
	BP-12 2-2.5	2-2.5'	4/13/2018	--	--	--	--	--	--	--
Portable Classroom/ Art Structure	BP-13 0.5-1	0.5-1'	4/12/2018	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179	<0.0179
	BP-13 1-1.5	1-1.5'	4/12/2018	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198	<0.0198
	BP-13 2-2.5	2-2.5	4/12/2018	--	--	--	--	--	--	--
	BP-14 0-0.5	0-0.5'	4/12/2018	--	--	--	--	--	--	--
	BP-15 0.5-1	0.5-1'	4/12/2018	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192
	BP-15 2-2.5	2-2.5'	4/12/2018	--	--	--	--	--	--	--
	BP-16 0-0.5	0-0.5'	4/12/2018	<0.0210	<0.0210	<0.0210	<0.0210	<0.0210	<0.0210	<0.0210
	BP-16 2-2.5	2-2.5'	4/12/2018	--	--	--	--	--	--	--
Building Perimeter	BP-17 0-0.5	0-0.5'	4/13/2018	<0.0209	<0.0209	<0.0209	<0.0209	<0.0209	<0.0209	<0.0209
	BP-17 2-2.5	2-2.5'	4/13/2018	--	--	--	--	--	--	--
Historical Structure	HS-1 0-0.5	0.5-1'	4/12/2018	<0.0234	<0.0234	<0.0234	<0.0234	<0.0234	<0.0234	<0.0234
	HS-1 2-2.5	2-2.5'	4/12/2018	--	--	--	--	--	--	--
	HS-2 0-0.5	0-0.5'	4/12/2018	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186	<0.0186
	HS-2 2-2.5	2-2.5'	4/12/2018	--	--	--	--	--	--	--
Newer Fill	FB-1 1-2	1-2'	4/12/2018	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180	<0.0180
USEPA RSL				4.1	0.2	0.17	0.23	0.23	0.24	0.24

Notes:

Polychlorinated biphenyls analyzed using U.S. EPA Method 8082.

bgs	Below ground surface.
<RDL	Indicates chemical not detected at or above stated laboratory reported detection limits.
--	Indicates sample not analyzed.
USEPA RSL	United States Environmental Protection Agency Regional Screening Levels for Residential Uses (May 2018).
J	Estimated concentration. See laboratory analytical reports for other lab qualifiers.

Table 3. Summary of Organochlorine Pesticides Detected in Soil Samples
Preliminary Environmental Assessment and SSI Sampling
John Gill Elementary School
Redwood City, California

Location	Sample ID	Sample Depth (feet bgs)	Date Sampled	Aldrin	Alpha-BHC	Beta-BHC	Delta-BHC	Gamma-BHC	4,4-DDD	4,4-DDE	4,4-DDT	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin	Endrin Aldehyde	Endrin Ketone	Heptachlor	Heptachlor Epoxide	Hexachloro benzene	Methoxyclor	Chlordane	Toxaphene
(Concentrations in milligrams per kilogram [mg/Kg])																								
Building Perimeter	BP-1 0.5-1	0.5-1'	4/12/2018	<0.0023	<0.0023	<0.0023	<0.0023	<0.0023	<0.0023	<0.0023	<0.0023	<0.00223	<0.0023	<0.0023	<0.0023	<0.0023	<0.0023	<0.0023	<0.0023	<0.0023	<0.0023	<0.0023	<0.0023	<0.446
	BP-1 2-2.5	2-2.5'	4/12/2018	<0.0227	<0.0227	<0.0227	<0.0227	<0.0227	<0.0227	<0.0227	<0.0227	<0.00227	<0.0227	<0.0227	<0.0227	<0.0227	<0.0227	<0.0227	<0.0227	<0.0227	<0.0227	<0.0227	<0.227	<0.454
	BP-2 0.5-1	0.5-1'	4/12/2018	<0.0236	<0.0236	<0.0236	<0.0236	<0.0236	<0.0236	<0.0236	<0.0236	<0.00236	<0.0236	<0.0236	<0.0236	<0.0236	<0.0236	<0.0236	<0.0236	<0.0236	<0.0236	<0.0236	<0.236	<0.473
	BP-2 1-1.5	1-1.5'	4/12/2018	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.00229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.229	<0.458
	BP-2 2-2.5	2-2.5'	4/12/2018	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	<0.00217	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	<0.217	<0.435
	BP-3 0.5-1	0.5-1'	4/13/2018	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	<0.00214	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	<0.214	<0.428
	BP-3 2-2.5	2-2.5'	4/13/2018	<0.0224	<0.0224	<0.0224	<0.0224	<0.0224	<0.0224	<0.0224	<0.0224	<0.00224	<0.0224	<0.0224	<0.0224	<0.0224	<0.0224	<0.0224	<0.0224	<0.0224	<0.0224	<0.0224	<0.224	<0.0403
	BP-4 0.5-1	0.5-1'	4/13/2018	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	<0.00214	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	<0.214	<0.428
	BP-4 2-2.5	2-2.5	4/13/2018	<0.0226	<0.0226	<0.0226	<0.0226	<0.0226	<0.0226	<0.0226	<0.0226	<0.00226	<0.0226	<0.0226	<0.0226	<0.0226	<0.0226	<0.0226	<0.0226	<0.0226	<0.0226	<0.0226	<0.226	<0.451
	BP-5 0.5-1	0.5-1'	4/13/2018	<0.0124	<0.0124	<0.0124	<0.0124	<0.0124	<0.0124	**0.000556J**	<0.0214	<0.00214	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	<0.0214	<0.214	<0.429
	BP-5 1-1.5	1-1.5'	4/13/2018	<0.0212	<0.0212	<0.0212	<0.0212	<0.0212	**0.00167J**	<0.0212	<0.0212	<0.00212	**0.000944J**	<0.0212	<0.0212	<0.0212	<0.0212	<0.0212	<0.0212	**0.000829J**	<0.0212	<0.0212	<0.212	<0.424
	BP-5 2-2.5	2-2.5'	4/13/2018	<0.0215	<0.0215	<0.0215	<0.0215	<0.0215	<0.0215	<0.0215	<0.0215	<0.00215	<0.0215	<0.0215	<0.0215	<0.0215	<0.0215	<0.0215	<0.0215	<0.0215	<0.0215	<0.0215	<0.215	<0.430
	BP-6 0.5-1	0.5-1'	4/21/2018	<0.0227	<0.0227	<0.0227	<0.0227	<0.0227	<0.0227	<0.0227	<0.0227	<0.00227	<0.0227	<0.0227	<0.0227	<0.0227	<0.0227	<0.0227	<0.0227	<0.0227	<0.0227	<0.0227	<0.227	<0.454
	BP-6 2-2.5	2-2.5	4/13/2018	<0.0228	<0.0228	<0.0228	<0.0228	<0.0228	<0.0228	<0.0228	<0.0228	<0.00228	<0.0228	<0.0228	<0.0228	<0.0228	<0.0228	<0.0228	<0.0228	<0.0228	<0.0228	<0.0228	<0.228	<0.455
	BP-7 0.5-1	0.5-1'	4/13/2018	<0.0235	<0.0235	<0.0235	<0.0235	<0.0235	<0.0235	<0.0235	<0.0235	<0.00235	<0.0235	<0.0235	<0.0235	<0.0235	<0.0235	<0.0235	<0.0235	<0.0235	<0.0235	<0.0235	<0.235	<0.470
	BP-7 2-2.5	2-2.5'	4/13/2018	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.00229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.229	<0.459
	BP-8 0.5-1	0.5-1'	4/13/2018	<0.0231	<0.0231	<0.0231	<0.0231	<0.0231	<0.0231	<0.0231	<0.0231	<0.00231	<0.0231	<0.0231	<0.0231	<0.0231	<0.0231	<0.0231	<0.0231	<0.0231	<0.0231	<0.0231	<0.231	<0.461
	BP-8 2-2.5	2-2.5	4/13/2018	<0.0238	<0.0238	<0.0238	<0.0238	<0.0238	<0.0238	<0.0238	<0.0238	<0.00238	<0.0238	<0.0238	<0.0238	<0.0238	<0.0238	<0.0238	<0.0238	<0.0238	<0.0238	<0.0238	<0.238	<0.477
	BP-9 0.5-1	0.5-1'	4/13/2018	<0.0239	<0.0239	<0.0239	<0.0239	<0.0239	<0.0239	<0.0239	<0.0239	<0.00239	**0.000591J**	<0.0239	<0.0239	<0.0239	<0.0239	<0.0239	**0.00587J**	<0.0239	<0.0239	<0.0239	**0.120J**	<0.478
	BP-9 2-2.5	2-2.5'	4/13/2018	<0.0218	<0.0218	<0.0218	<0.0218	<0.0218	<0.0218	<0.0218	<0.0218	<0.00218	<0.0218	<0.0218	<0.0218	<0.0218	<0.0218	<0.0218	**0.00294J**	**0.00045J**	<0.0218	<0.0218	**0.0668J**	<0.437
	BP-10 0.5-1	0.5-1'	4/13/2018	<0.0213	<0.0213	<0.0213	<0.0213	<0.0213	**0.00494J**	<0.0213	**0.000924J**	<0.0213	<0.0213	<0.0213	<0.0213	<0.0213	<0.0213	<0.0213	**0.000467J**	<0.0213	<0.0213	<0.0213	**0.0562J**	<0.426
	BP-10 1-1.5	1-1.5'	4/13/2018	<0.0215	<0.0215	<0.0215	<0.0215	<0.0215	<0.0215	<0.0215	**0.00331J**	<0.00215	<0.0215	<0.0215	<0.0215	<0.0215	<0.0215	<0.0215	<0.0215	**0.000544J**	**0.000643J**	<0.0215	<0.215	<0.430
	BP-10 2-2.5	2-2.5'	4/13/2018	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	**0.000544J**	**0.00358J**	**0.00129J**	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	**0.000895J**	<0.0217	**0.00169J**	<0.0217	**0.202J**	<0.433
	BP-11 0.5-1	0.5-1'	4/13/2018	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	<0.00217	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	<0.217	<0.435
	BP-11 2-2.5	2-2.5'	4/13/2018	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.00229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.229	<0.458
	BP-12 0.5-1	0.5-1'	4/13/2018	<0.0221	<0.0221	<0.0221	<0.0221	<0.0221	<0.0221	<0.0221	<0.0221	<0.00221	<0.0221	<0.0221	<0.0221	<0.0221	<0.0221	<0.0221	**0.00408J**	<0.0221	<0.0221	<0.0221	**0.153J**	<0.442
	BP-12 2-2.5	2-2.5'	4/13/2018	<0.0218	<0.0218	<0.0218	<0.0218	<0.0218	<0.0218	<0.0218	<0.0218	<0.00218	<0.0218	<0.0218	<0.0218	<0.0218	<0.0218	<0.0218	**0.0679J**	**0.00777J**	<0.0218	<0.0218	**1.57J**	<0.436
	BP-12	3-3.5'	9/15/2018	<0.0224	<0.0224	<0.0224	<0.0224	<0.0224	<0.0224	<0.0224	<0.0224	<0.00224	<0.0224	<0.0224	<0.0224	<0.0224	<0.0224	<0.0224	**0.000673**	**0.00187**	<0.0224	<0.0224	<0.224	<0.449
	BP-12 @ 5'S.O.	1-1.5'	9/15/2018	<0.0231	<0.0231	<0.0231	<0.0231	<0.0231	<0.0231	<0.0231	<0.0231	<0.00231	<0.0231	<0.0231	<0.0231	<0.0231	<0.0231	<0.0231	<0.0231	<0.0231	<0.0231	<0.0231	<0.231	<0.463
	BP-12 @ 5'S.O.	2-2.5'	9/15/2018	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	<0.00225	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	<0.225	<0.450
Portable Classroom/ Art Structure	BP-13 0.5-1	0.5-1'	4/12/2018	<0.0211	<0.0211	<0.0211	<0.0211	<0.0211	<0.0211	<0.0211	<0.0211	<0.00211	<0.0211	<0.0211	<0.0211	<0.0211	<0.0211	<0.0211	<0.0211	<0.0211	<0.0211	<0.0211	<0.211	<0.421
	BP-13 1-1.5	1-1.5'	4/12/2018	<0.0233	<0.0233	<0.0233	<0.0233	<0.0233	<0.0233	<0.0233	<0.0233	<0.00233	<0.0233	<0.0233	<0.0233	<0.0233	<0.0233	<0.0233	<0.0233	<0.0233	<0.0233	<0.0233	<0.233	<0.465
	BP-13 2-2.5	2-2.5	4/12/2018	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.00229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.0229	<0.229	<0.457
	BP-14 0-0.5	0-0.5'	4/12/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-15 0.5-1	0.5-1'	4/12/2018	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	<0.00225	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	<0.0225	<0.225	<0.451
	BP-15 2-2.5	2-2.5'	4/12/2018	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	<0.00217	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	<0.0217	<0.217	<0.435
	BP-16 0-0.5	0-0.5'	4/12/2018	<0.0247	<0.0247	<0.0247	<0.0247	<0.0247	<0.0247	<0.0247	<0.0247	<0.00247	<0.0247	<0.0247	<0.0247	<0.0247	<0.0247	<0.0247	<0.0247	<0.0247	<0.0247	<0.0247	<0.247	<0.494
	BP-16 2-2.5	2-2.5'	4/12/2018	<0.0246	<0.0246	<0.0246	<0.0246	<0.0246	<0.0246	<0.0246	<0.0246	<0.00246	<0.0246	<0.0246	<0.0246	<0.0246	<0.0246	<0.0246	<0.0246	<0.0246	<0.0246	<0.0246	<0.246	<0.492
Building Perimeter	BP-17 0-0.5	0-0.5'	4/13/2018	<0.0246	<0.0246	<0.0246	<0.0246	<0.0246	<0.0246	<0.0246	<0.0246	<0.00246	<0.0246	<0.0246	<0.0246	<0.0246	<0.0246	<0.0246	<0.0246	<0.0246	<0.0246	<0.0246	<0.246	<0.492
	BP-17 2-2.5	2-2.5'	4/13/2018	<0.0246	<0.0246	<0.0246	<0.0246	<0.0246	<0.0246	<0.0246	<0.0246	<0.00246	<0.0246	<0.0246	<0.0246	<0.0246	<0.0246	<0.0246	<0.0246	<0.0246	<0.0246	<0.0246	<0.246	<0.493
Historical Structure	HS-1 0-0.5	0.5-1'	4/12/2018	<0.0276	<0.0276	<0.0276	<0.0276	<0.0276	<0.0276	**0.00695J**	<0.0276	<0.00276	<0.0276	<0.0276	<0.0276	<0.0276	<0.0276	<0.0276	<0.0276	<0.0276	<0.276	<0.276	**0.315J**	<0.551
	HS-1 2-2.5	2-2.5'	4/12/2018	<0.0242	<0.0242	<0.0242	<0.0242	<0.0242	<0.0242	<0.0242	<0.0242	<0.00242	<0.0242	<0.0242	<0.0242	<0.0242	<0.0242	<0.0242	<0.0242	<0.0242	<0.0242	<0.0242	<0.242	<0.485
	HS-2 0-0.5	0-0.5'	4/12/2018	<0.0219	<0.0219	<0.0219	<0.0219	<0.0219	<0.0219	<0.0219	<0.0219	<0.00219	<0.0219	<0.0219	<0.0219	<0.0219	<0.0219	<0.0219	<0.0219	<0.0219	<0.0219	<0.0219	<0.219	<0.439
	HS-2 2-2.5	2-2.5'	4/12/2018	<0.0240	<0.0240	<0.0240	<0.0240	<0.0240	<0.0240	<0.0240	<0.0240	<0.00240	<0.0240	<0.0240	<0.0240	<0.0240	<0.0240	<0.0240	<0.0240	<0.0240	<0.0240	<0.0240	<0.240	<0.481
Newer Fill	FB-1 1-2	1-2'	4/12/2018	<0.0212	<0.0212	<0.0212	<0.0212	<0.0212	<0.0212	<0.0212	<0.0212	<0.00212	<0.0212	<0.0212	<0.0212	<0.0212	<0.0212	<0.0212	<0.0212	<0.0212	<0.0212	<0.0212	<0.212	<0.423
USEPA RSL				**0.039**	**0.086**	**0.3**	**NE**	**0.57**	**1.9**	**2.0**	**1.9**	**0.034**	**470**	**470**	**NE**	**19**	**NE**	**NE**	**0.13**	**0.07**	**0.21**	**320**	**1.7**	**0.49**
HERO HHRA Note 3				**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**0.44**	**NA**

Notes:

Organochlorine pesticides analyzed using U.S. EPA Method 8081.

bgs Below ground surface.

<RDL Indicates chemical not detected at or above stated laboratory reported detection limits.

-- Indicates sample not analyzed.

NE Not established.

NA Not applicable.

USEPA RSL United States Environmental Protection Agency Regional Screening Levels for Residential Uses (May 2018).

HERO HHR Modified Screening Levels, January 2018.

Indicates concentration exceeds one or more regulatory screening level.

J Estimated concentration. See laboratory analytical reports for other lab qualifiers.

Table 4. Summary of Polycyclic Aromatic Hydrocarbons Detected in Soil Samples
Preliminary Environmental Assessment
John Gill Elementary School
Redwood City, California

Location	Sample ID	Sample Depth (feet bgs)	Date Sampled	Anthracene	Acenaphthene	Acenaphthylene	Benz(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(g,h,i) perylene	Benzo(k) fluoranthene	Chrysene	Dibenzo(a,h) anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene	1-Methyl-naphthalene	2-Methyl-naphthalene	2-Chloro-naphthalene
(Concentrations in milligrams per kilogram [mg/Kg])																						
Building Perimeter	BP-1 0.5-1	0.5-1'	4/12/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-1 2-2.5	2-2.5'	4/12/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-2 0.5-1	0.5-1'	4/12/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-2 1-1.5	1-1.5'	4/12/2018	<0.00687	<0.00687	<0.00687	<0.00687	<0.00687	<0.00687	<0.00687	<0.00687	<0.00687	<0.00687	<0.00687	<0.00687	<0.00687	<0.0229	<0.00687	<0.00687	<0.0229	<0.0229	<0.0229
	BP-2 2-2.5	2-2.5'	4/12/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-3 0.5-1	0.5-1'	4/13/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-3 2-2.5	2-2.5'	4/13/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-4 0.5-1	0.5-1'	4/13/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-4 2-2.5	2-2.5	4/13/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-5 0.5-1	0.5-1'	4/13/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-5 1-1.5	1-1.5'	4/13/2018	**0.0700J**	**0.0604J**	**0.0619J**	**0.0831**	**0.0739**	**0.0848**	**0.0792**	**0.0776**	**0.0825**	**0.0624J**	**0.0812**	**0.0654**	**0.0669**	**0.0658J**	**0.0772**	**0.0754**	**0.0642J**	**0.0579J**	**0.0529J**
	BP-5 2-2.5	2-2.5'	4/13/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-6 0.5-1	0.5-1'	4/13/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-6 2-2.5	2-2.5	4/13/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-7 0.5-1	0.5-1'	4/13/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-7 2-2.5	2-2.5'	4/13/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-8 0.5-1	0.5-1'	4/13/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-8 2-2.5	2-2.5	4/13/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-9 0.5-1	0.5-1'	4/13/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-9 2-2.5	2-2.5'	4/13/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-10 0.5-1	0.5-1'	4/13/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-10 1-1.5	2-2.5	4/13/2018	**0.00111**	**0.00124J**	<0.00645	**0.0611**	**0.0687**	**0.0931**	**0.0514**	**0.0328**	**0.0761**	**0.0140**	**0.111**	**0.00180J**	**0.0388**	**0.00254J**	**0.0405**	**0.122**	<0.0215	**0.00242J**	<0.0215
	BP-10 2-2.5	0.5-1'	4/13/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-11 0.5-1	2-2.5'	4/13/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-11 2-2.5	0.5-1'	4/13/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-12 0.5-1	2-2.5	4/13/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-12 2-2.5	0.5-1'	4/12/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Portable Classroom/Art Structure	BP-13 0.5-1	2-2.5	4/12/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-13 1-1.5	0-0.5'	4/12/2018	<0.00698	<0.00698	<0.00698	<0.00698	<0.00698	**0.00452J**	**0.00462J**	<0.00698	**0.00533J**	<0.00698	<0.00698	<0.00698	<0.00698	<0.0233	**0.00134J**	**0.00339J**	<0.0233	<0.0233	<0.0233
	BP-13 2-2.5	0.5-1'	4/12/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-14 0-0.5	2-2.5	4/12/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-15 0.5-1	0-0.5'	4/12/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-15 2-2.5	2-2.5'	4/12/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-16 0-0.5	0-0.5'	4/13/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-16 2-2.5	2-2.5	4/13/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Building Perimeter	BP-17 0-0.5	1-2'	4/12/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BP-17 2-2.5	0.5-1'	4/12/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Historical Structure	HS-1 0-0.5	0.5-1'	4/12/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	HS-1 2-2.5	2-2.5'	4/12/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	HS-2 0-0.5	0-0.5'	4/12/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	HS-2 2-2.5	2-2.5'	4/12/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Newer Fill	FB-1 1-2*	2-2.5	4/12/2018	<0.00635	<0.00635	<0.00635	**0.000893J**	<0.00635	<0.00635	<0.00635	<0.00635	**0.000870J**	<0.00635	**0.00120J**	<0.00635	<0.00635	<0.0212	**0.00103J**	**0.000656J**	<0.0212	<0.0212	<0.0212
USEPA RSL				18,000	3,600	NE	1.1	0.11	1.1	NE	11	110	0.11	2,400	2,400	1.1	3.8	NE	1,800	18	240	4,800

Notes:
Polycyclic aromatic hydrocarbons (PAHs) analyzed using U.S. EPA Method 8270-Selective Ion Mode (SIM) for lower reporting limits.

bgs Below ground surface.
<RDL Indicates chemical not detected at or above stated laboratory reported detection limits.
-- Indicates sample not analyzed.
NE Not established.
J Estimated concentration. See laboratory analytical reports for other lab qualifiers.
USEPA RSL United States Environmental Protection Agency Regional Screening Levels for Residential Uses (May 2018).
Indicates concentration exceeds one or more regulatory screening level.

* Volatile organic compounds (VOCs) analyzed using U.S. EPA Method 8260B; benzene and toluene were detected at 0.0013 and 0.000525J mg/kg, respectively. No other VOCs were detected at or above reporting limits.

Table 5. Summary of Naturally Occurring Asbestos Detected in Soil Samples
Preliminary Environmental Assessment
John Gill Elementary School
Redwood City, California

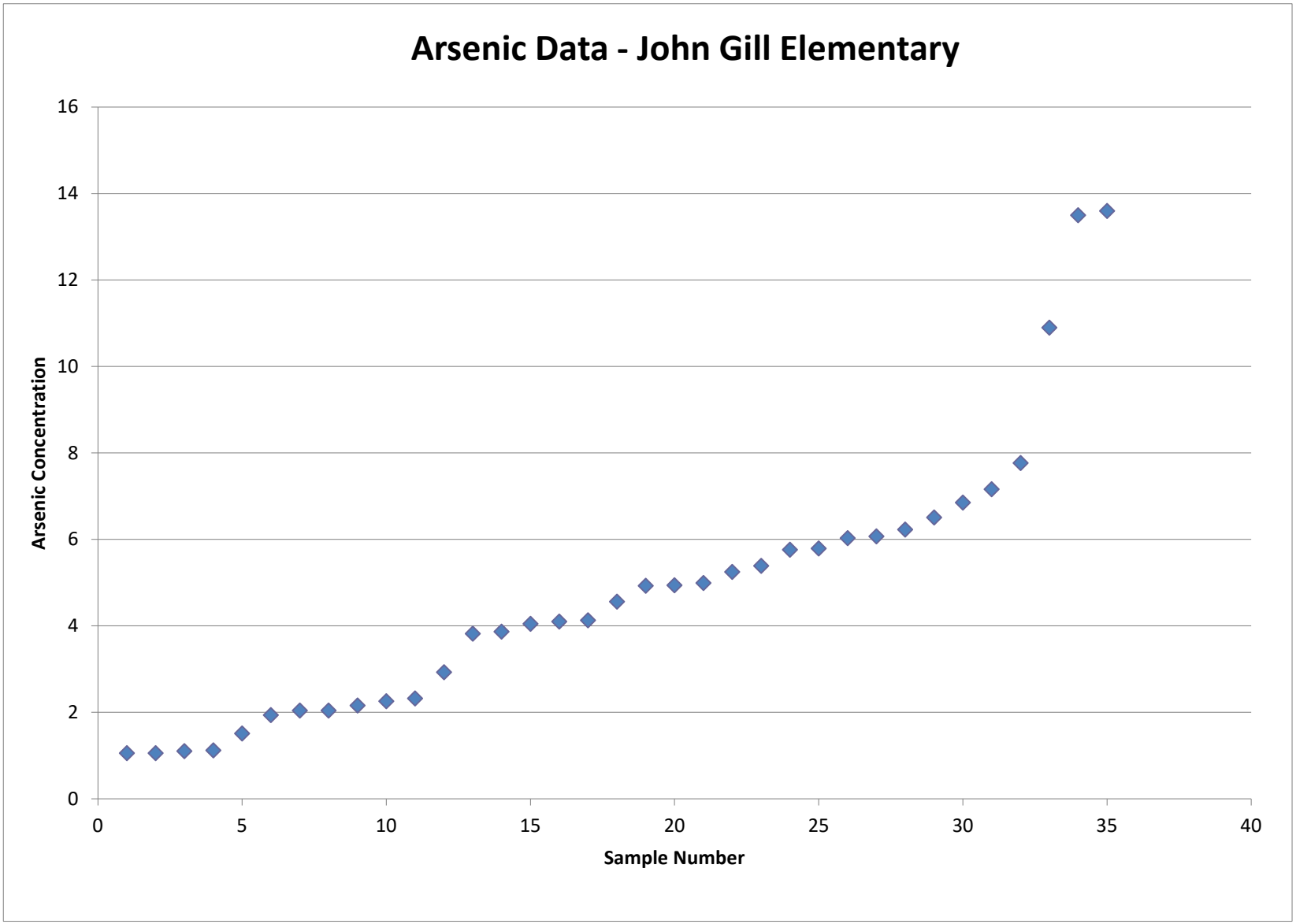
Sample ID	Sample Type	Sample Depth (feet bgs)	Polarized Light Microscopy Results[1]	Transmission Electron Microscopy Results[2]
BP-2 @1-1.5'	**Fill**	1-1.5	<0.25% ND (0 Points Counted)	**0.0002%** (0.0002% Chrysotile <0.0001% Amphibole)
BP-5@0.5-1.5'	**Fill**	0.5-1.5	<0.25% ND (0 Points Counted)	<0.0001%
BP-10@0.5-2.5'	**Fill**	0.5-2.5	<0.25% ND (0 Points Counted)	**0.0006%** (0.0006% Chrysotile <0.0001% Amphibole)
BP-13@0.5-1.5'	**Fill**	0.5-1.5	<0.25% ND (0 Points Counted)	<0.0001
FB-1@0-0.5'	**Fill**	0-0.5	<0.25% ND (0 Points Counted)	<0.0001
FB-1@0.5-3.5'	**Fill**	0.5-3.5	<0.25% ND (0 Points Counted)	<0.0001%
BP-2@2-2.5'	**Native Soils**	2-2.5	<0.25% ND (0 Points Counted)	**0.014%** (<0.0001% Chrysotile 0.014% Amphibole)
BP-7@0.5-1.5'	**Native Soils**	0.5-1.5	<0.25% ND (0 Points Counted)	<0.0001%
BP-7@1.5-2.1'	**Native Soils**	1.5-2.0	<0.25% ND (0 Points Counted)	**0.029%** (0.029% Chrysotile <0.0001% Amphibole)
BP-13@2-2.5'	**Native Soils**	2-2.5	<0.25% ND (0 Points Counted)	**0.026%** (0.0086% Chrysotile 0.017% Amphibole)
BP-17@0.5-2.5'	**Native Soils**	0.5-2.5	<0.25% ND (0 Points Counted)	<0.0001%
FB-1@3.5-5.0'	**Native Soils**	3.5-5.0	<0.25% ND (0 Points Counted)	<0.0001%
BP-1@1-2'	**Bedrock**	1-2	<0.25% ND (0 Points Counted)	<0.0001%
BP-5@1.5-2.5'	**Bedrock**	1.5-2.5	<0.25% ND (0 Points Counted)	<0.0001%
BP-7@2-2.5'	**Bedrock**	2-2.5	<0.25% ND (0 Points Counted)	**0.60%** (0.60% Chrysotile <0.0001 Amphibole)
BP-12@0.5-2.5'	**Bedrock**	0.5-2.5	<0.25% ND (0 Points Counted)	**0.0084%** (0.0084% Chrysotile <0.0001 Amphibole)
DTSC Screening Level			**0.25%**	**<25% of Samples >0.01%**

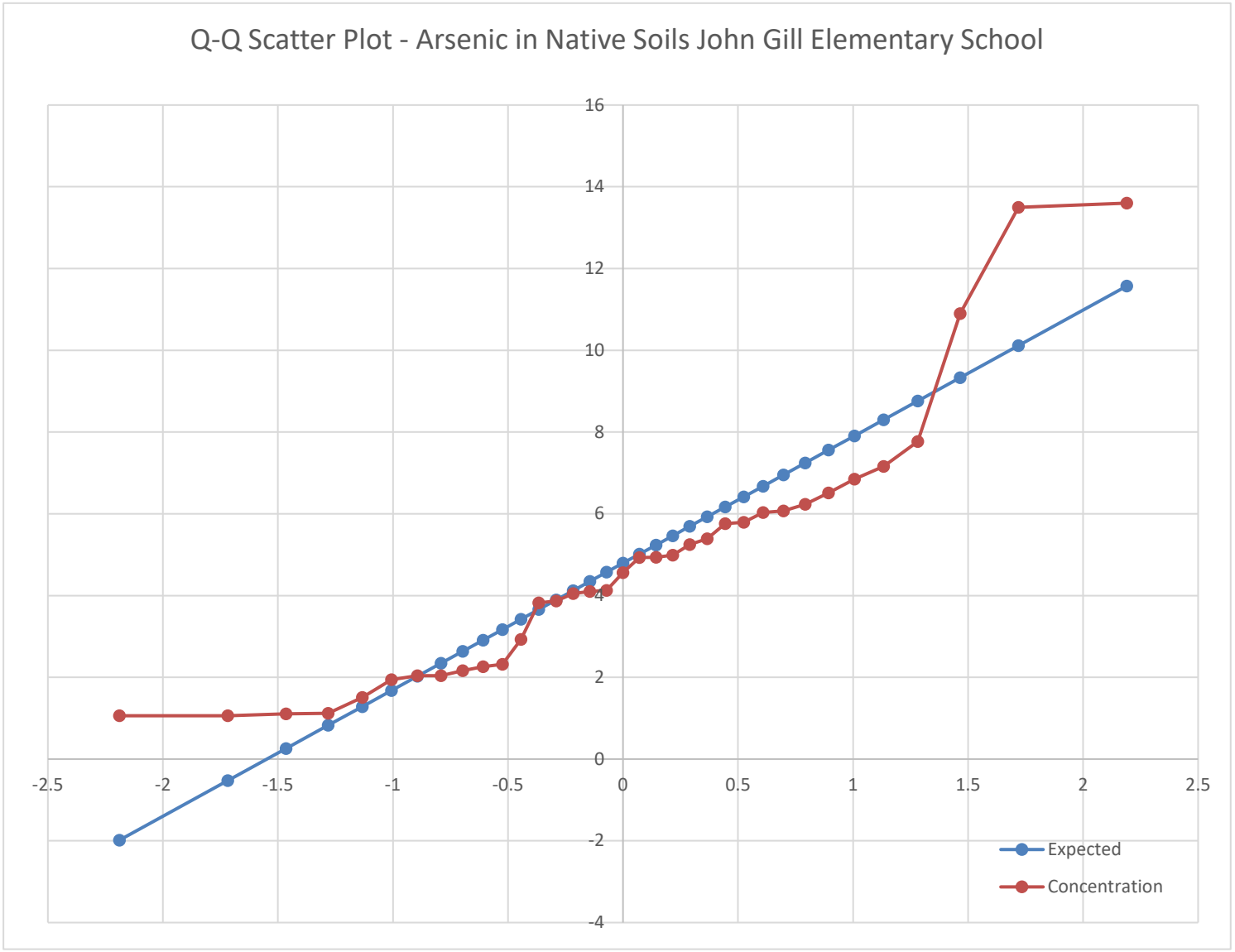
Notes:

bgs	Below ground surface.
[1]	California Air Resources Board (ARB) Method 435 - 400 Point Count.
[2]	TEM NOA EPA /California ARB Quantitative.
<RDL	Indicates compound not detected at or above stated laboratory reporting limits.
0.25% (PLM)/ 0.01% (TEM)	Department of Toxic Substances Control (DTSC) Screening Level - DTSC School Division screening concentration.
	Indicates concentration exceeds regulatory screening level of 0.01%.

Appendix C

Background Arsenic Plots


Arsenic Data - John Gill Elementary
Arsenic Concentration
Sample Number
0
2
4
6
8
10
12
14
16
0
5
10
15
20
25
30
35
40


Q-Q Scatter Plot - Arsenic in Native Soils John Gill Elementary School
16
14
12
10
8
6
4
2
0
-2
-4
-2.5
-2
-1.5
-1
-0.5
0
0.5
1
1.5
2
2.5
Expected
Concentration

Appendix D

Health and Safety Plan

SITE HEALTH AND SAFETY PLAN FOR SAMPLING

Project Name: John Gill School **Project Number:** _____ **Date:** 11/19/18

Anyone who enters a hazardous waste site must recognize and understand the potential hazards to health and safety associated with the cleanup/investigation of that site. Personnel actively involved in the field project must he thoroughly familiar with program and procedures contained in this SSP. This SSP must be available on-site when performing fieldwork. Periodic inspections may be made to evaluate if proper safety measures are being followed. In addition, a copy of the SSP must be kept in the job file.

Site Description

Client Contact: John Baker, Superintendent

Telephone Number/Email: (650) 482-2230
jbaker@rcsdk8.net

John Gill School

555 Avenue Del Ora

Site Location: **Redwood City, California 94062**

Site Type (Check if Applicable): ☐ Residential ☐ Commercial ☐ Industrial ☐ Undeveloped ☑ Other School

Notable Features: The Site is an active school in a residential area of Redwood City.

Site Background: The Site has been a school since the late 1940s. The southern portion of the Site will be redeveloped. Remedial activities will take place in three locations around the southern portion of the Site.

Organizational Structure

Project Manager: Tom McCloskey Site Safety Officer: Chris Vertin

Field Personnel: Chris Vertin

Regulatory Agency Contact: _____ Phone Number: (916) 255-3590

All of the above personnel have had 40-hour OSHA training and the Project Leader has had 8-hour supervisory training.

Work Plan* (check if applicable)

Objective of the proposed work: Remedial Activities and Confirmation Sampling

The following would be performed during this project:

- ☑ Excavation / Trenching
- ☐ Drilling / Soil Boring
- ☐ Monitoring Well Installation
- ☐ Well Gauging
- ☐ Well Development
- ☐ Groundwater Sampling
- ☑ Soil Sampling
- ☐ Soil Vapor Sampling
- ☐ Remediation System Installation
- ☐ Other(s) _____

Chemical Hazards (check if applicable)

Chemical hazards possibly to be on-site in soils and/or groundwater are as follows:

		Symptoms of Over-Exposure
☐	**Gasoline -**	Skin irritant, disturbance of eyes. Deep burning in the throat and respiratory tract and bronchopneumonia. Repeated or chronic dermal contact may result in drying of the skin, lesions, and other dermalogic conditions.
☐	**Diesel -**	Irritation to *skin.* Prolonged breathing at high vapor concentrations can effect central nervous system.
☐	**Benzene -**	Irritation of the eyes, nose, and respiratory system. Headache, giddiness, fatigue, anorexia, staggered gait, and dermatitis.
☐	**Ethylbenzene -**	Irritation of eyes and mucous membranes, headache, dermatitis, narcosis, and coma.
☐	**Toluene -**	Irritation of eyes and mucous membranes, headache, dermatitis, narcosis, and coma.
☐	**Xylenes -**	Dizziness, excitement, drowsiness, staggering gait, irritation of eyes, nose, and throat, nausea, vomiting, and dermatitis.
☑	**Arsenic -**	Irritation of the skin, possible dermatitis, respiratory distress, diarrhea, kidney damage, muscular tremors, seizure; possible gastrointestinal tract and reproductive effects, and possible liver damage.
☐	**Lead -**	Weakness, insomnia, constipation, abdominal pain, colic, anemia, paralysis of the wrists and ankles, encephalopathy, kidney disease, irritation of the eyes, and hypotension.
☑	**Asbestos - NOA**	Difficulty breathing, interstitial fibrosis, restricted pulmonary effects, finger clubbing, and irritation of the eyes.
☑	**OCPs and Chlordane -**	Blurred vision, conjunctivitis, ataxia, delirium, coughing, abdominal pains, nausea, vomiting, diarrhea, irritability, and convolutions.
☐	**Dieldrin -**	Headache, dizziness, nausea, vomiting, sweating, myoclonic limb jerks, clonic and tonic convulsions, and coma.
☐	**Total DDT -**	Irritation of the eyes and skin, paresthesia of the tongue, lips, and face, dizziness, confusion, headache, fatigue, convulsions, and paresis of the hands
☐	**DCA -**	Headaches, loss of appetite, nausea, vomiting, intense jaw pain, and cranial nerve palsy.
☐	**DCE -**	Irritation of eyes and respiratory system, and depression of the central nervous system.
☐	**TCA -**	Irritation of the eyes, skin, nose, throat, and respiratory system, coughing, dyspnea, delayed pulmonary edema, eye and skin burns, dermatitis, salivation, vomiting, and diarrhea.
☐	**TCE -**	Irritation of the eyes and skin, headaches, vertigo, giddiness, sleepiness, nausea, vomiting, dermatitis, cardiac arrhythmia, paresthesia, and liver injury.

☐	**H_2S**	Irritation of the eyes and respiratory system, apnea, coma, convolutions, conjunctivitis, eye pain, lacrimation, photophobia, corneal vesiculation, dizziness, headaches, fatigue, irritability, insomnia, and gastrointestinal disturbance.
☐	**PCBs**	The most commonly observed health effects in people exposed to extremely high levels of PCBs are skin conditions, such as chloracne and rashes. Common symptoms included dermal and ocular lesions, irregular menstrual cycles and lowered immune responses. Other symptoms included fatigue, headaches, coughs, and unusual skin sores.
☐	**Dioxins**	Short-term exposure of humans to high levels of dioxins may result in skin lesions, such as chloracne and patchy darkening of the skin, and altered liver function. Long-term exposure is linked to impairment of the immune system, the developing nervous system, the endocrine system and reproductive functions.
☐	**PAHs**	Eye irritation, nausea, vomiting, diarrhea and confusion. Other symptoms to the skin include irritation and inflammation.
☐	**Radon**	Severe symptoms of long-term exposure to elevated levels may include persistent cough, coughing up blood, wheezing, shortness of breath, hoarseness, chest pain (especially when you laugh), frequent infections such as bronchitis and pneumonia.

Exposure to chemicals should be avoided through proper personal hygiene practices. Although some chemicals can exhibit identifiable acute health effects these exposures are unlikely. Unless the chemical exposure is excessive, it is unlikely that the exposure will be identifiable or exhibit the above symptoms of over-exposure. If you think you have been exposed to a chemical notify your supervisor immediately.

If any of the above symptoms occur, please leave the site for a safe location immediately. First aid should also he given immediately and the Project Manager and Site Safety Officer should be contacted. If needed, emergency procedures should he followed.

Non-Chemical Hazards (check if applicable)

Non-chemical hazards known or suspected to be on-site are as follows:

☑	**Heavy Equipment**	Heavy equipment should he in good working order and operated by an experienced and licensed person in accordance with recognized industry standards. Keep safe distance from heavy machinery so that you would not be in the path of a moving part if it were to swing suddenly. Always be aware of the movements of machinery around you. Approach vehicles from the driver's side. Make sure the vehicle operator sees you. Make eye contact. Personnel working in the vicinity of construction equipment shall wear orange safety vests for increased visibility, hard hat, and steel-toed boots at a minimum. Vehicles should be equipped with a flag, beacon and/or hazard flashers should be activated per the IIPP when working around heavy equipment.
☑	**Slip/Fall Hazards -**	Wet surfaces, inclines, or other obstacles that make movement on-site difficult; good housekeeping shall be practiced and shoes with traction shall be worn.
☑	**Noise -**	Excessive noise can make communication difficult or impossible; workers will be required to wear earplugs for all operations involving the use of power or pneumatic equipment that generates loud noise levels.
☑	**Heat/Cold Stress -**	Physical work in warm weather and/or the use of personal protective equipment

may induce heat issues symptoms including cramps, discomfort, and drowsiness, resulting in impaired function; can lead to heat stroke and death. Cool drinking water or other electrolyte replacing liquids shall be available on-site at all times. Work breaks shall be given as necessary, based on temperature and monitoring of workers.

☑ **Vehicular Traffic -** If the work area is in or near traffic areas where vehicular dangers are present, on-sire workers shall wear orange safety vests or other suitable garments marked with or made of reflectorized or high-visibility material. The work area should he clearly marked using signs, barricades, temporary fencing, safety cones, and/or caution tape. Flaggers are to be used to direct traffic if needed.

☑ **Excavation -** Excavation areas present a danger of falling and cave-in. For excavations of less than 5 feet in depth, follow general excavation safety protocols. Never leave open excavations unmarked. If possible, avoid entering any excavation. If entry is necessary and the excavation is greater than 5 feet in depth (even if it is shored), an OSHA excavation permit must he obtained and a separate excavation safety plan shall be prepared

☑ **Underground Utilities -** Subsurface utilities are within the work area and may be encountered during drilling or any subsurface exploration. Utility companies or owners must he contacted and asked to determine the location of the underground utility before excavation. While the excavation is open, underground installations must be protected, supported, or removed to protect employees. When utility companies cannot respond to a request to locate underground utility installations, or cannot establish the exact location of the installations, work may proceed with caution, only upon approval by the Project Manager and Site Safety Officer. Use of detection equipment or other methods of locating utility installations may be additionally required. In an area with suspected underground utilities, all boring locations must he hand probed to a minimum depth of 5 feet.

Please indicate the following were performed prior to work:

☐ **Underground Service Alert (USA)**

☐ **Private Utility Locator**

Please indicate any concerns discussed with wither USA or the private utility locator:

☐ No Concerns Identified

☐ Concerns (Please Describe Below)

_____

_____

_____

☐ **Overhead Lines -** Power and electrical lines are present within the work area. Extreme caution should be used when overhead electrical power or other lines are present. Use of equipment directly under or near lines should be avoided. If possible, the utility company or owner should be contacted to temporary turn off line power or reroute line the path during the course of work in that location.

☐ **Lifting Hazards -** Proper lifting technique should be used by bending at the knees and using the legs for strength. Item being lifted should be held close to the body and back-twisting motions should be avoided.

☐ **55-Gallon Drums & Containers -** Caution should be used when handling drums and other heavy containers. During movement, the integrity of the drums may be compromised. Drums or

containers on-site may be cracked, dented, or altered such that lids are not securely attached. If needed, contents should be secured in another drum, or drums should be placed in drum packers for further protection. Always use the proper equipment, designed for the specific application, when handling and moving heavy objects.

☐ **High Crime Area -** Any area in which one feels threatened or is known to be a high crime area. Always be aware of your surroundings and never leave equipment unattended.

☐ **Hot Surface -** Surfaces on-site will be at extreme temperature conditions (i.e. asphalt). Caution should be used around hot surfaces on-site, and steel-toed hoots should not be worn when hot surfaces are present. All hot surface hazards should be marked and taped-off to guard against accidental entry.

☐ **Low Lighting Conditions -** Time or location may introduce inadequately lit work areas. On-site work should be concluded before dark. If work is anticipated to continue after dark, a light tower should be used in appropriate areas, as directed by the Project Manager and Site Safety Officer.

☑ **Poisonous / Dangerous Animals & Insects** Including but not limited to snakes, wasps, dogs, cattle, etc. Use caution on-site when dangerous animals and insects are suspected to be present. Avoid contact when possible and if the situation becomes threatening, leave the site immediately. If allergic to insect stings, always carry an anaphylactic shock kit.

☐ **Confined Space -** Any space that limits or constricts entry or exit; is not designed for continuous employee occupancy; has unfavorable natural ventilation. Examples of possible confined spaces include tanks, vessels, excavations, silos, storage bins, etc. For all work in confined spaces, a separate confined space entry program and permit must be established.

☐ **Other -(Specify)** _____

Emergency Notification

Local Police, 911 or if NA: (650) 780-7100 – Redwood City Police Department, Non-Emergency Calls

State Police, 911 or if NA:

Fire, 911 or if NA : (650) 780-7400 – Redwood City Fire Department

Ambulance, 911 or if NA:

SITE HEALTH AND SAFETY PLAN FOR SAMPLING

Medical (Attach Map--Mandatory)

Nearest Hospital: Kaiser Permanente Redwood City Medical Center,1100 Veterans Blvd., Redwood City, CA 94062

Hospital Telephone Number: (650) 299-2000

Directions: **See Attached Map** **Figure D-1**

Local Regulatory Agencies

Central Valley Regional Water Quality Control Board (559) 445-5116	Department of Toxic Substances Control (800) 728-9642	San Mateo County Environmental Health Division (650) 372-6200
		Other:

Communications

☐ Two-Ways Radios ☑Cellular Phone ☑ Verbal

Personal Protective Equipment (PPE)

Appropriate on-site personnel have had the 40-hour OSHA class in Hazardous Waste Operations / Emergency Response.

Level of Protective Equipment ☐ A ☐ B ☐ C ☑ D ☑ See PPE Below

The following PPE is required to be available on-site and is to be used on an as needed basis:

☐ Hard Hat
☑ Safety Eye Wear (Type) _____
☑ Safety Boots
☐ Respirator (Type) _____
☑ Orange Vest
Filter (Type) _____
☑ Hearing Protection
☑ Gloves (Type) Nitrile
☐ Tyvex Coverall
☐ Other _____

Monitoring Equipment On-Site

The following monitoring equipment is to be available on-site and is to be used on an as needed basis:

☐ Organic Vapor Meter
☐ Draeger Tube _____
☐ Oxygen Meter
☐ Passive Dosimeter
☐ Combustible Gas Meter
☐ Air Sampling Pump
☐ H_2S Meter
☐ Filter Media _____

All field equipment shall be properly calibrated and functioning normally. If the equipment calibration date is unknown, the equipment should be taken out of service until calibrated to manufacturers specifications.

Site Control Procedures

All unauthorized persons shall be kept a safe distance form the work area. The work area shall be denoted with fencing, barricades, cones, and/or barrier tape.

Decontamination

Standard procedures, unless notified otherwise by the Project Manager and/or Site Safety Officer.

Personnel: Wash with soap and water.

Equipment: All sampling equipment is to be cleaned with a steam cleaner or a liquinox solution and distilled water prior to use at each sampling location.

Standard Safe Work Practices

1. Eating, drinking, chewing gum or tobacco, and smoking are prohibited in the contaminated or potentially contaminated area where the possibility for the transfer of contaminants exists.

2. Avoid contact with potentially contaminated substances. Do not walk through puddles, pools, mud, etc. Avoid, whenever possible, kneeling on the ground and leaning or sitting on equipment or the ground. Do not place monitoring equipment on potential contaminated surfaces (i.e., ground, etc.).

3. All field crew members should make use of their senses to alert them to potentially dangerous situations in which they should not become involved (i.e., the presence of strong, irritating, or nauseating odors).

4. Prevent spillage to the extent possible. In the event that a spill occurs, contain liquid if possible.

5. Prevent splashing of the contaminated materials.

6. Field crew members shall be familiar with the physical characteristics of the site, including:

- Wind direction in relation to work area contaminant location;
- Accessibility of other workers, equipment, vehicles;
- Communications;
- Exclusion zone (areas of known or suspected contamination);
- Site access;
- Nearest water source;
- The location of the nearest telephone;
- The location of the nearest medical facility.

7. The number of personnel and equipment in the contaminated area should be minimized, but only to the extent consistent with workforce requirements for safe site operations.

8. Personal Protection Equipment must be used properly to their fullest extent.

9. For more information, please review (Injury and Illness Prevention Program).

Standard Site Safety Protocol

1. If the site is located in a neighborhood known for high crime (e.g., East Palo Alto, South-Central Los Angeles, the Tenderloin in San Francisco, etc.) discuss personal protection, such as hiring of security personnel, with your Project Manager.

2. Leave the site destination, including address and time expected to return with Project Manager. If the Project Manager is not in the office, leave the information with another person who has knowledge of the project.

3. Always take a radio or cellular phone along for quick communication. Keep the radio and/or cellular phone on your person. (It will not do you any good in the truck).

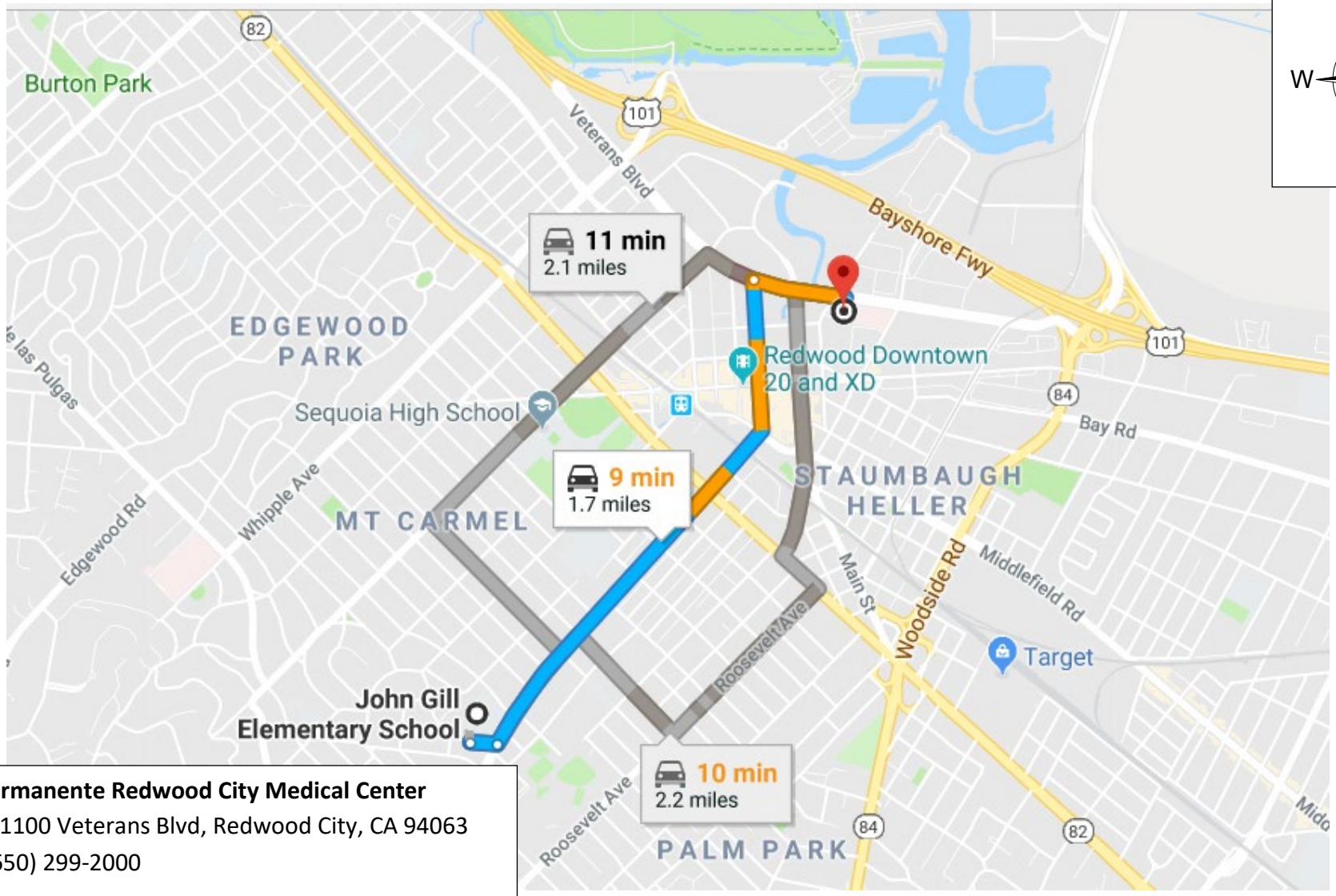
4. Be aware of your surroundings and trust your instincts. Leave if you feel threatened.

5. Do not stay on-site alone after dark unless the Project Manager is aware.

6. If the site visit will take place in or near a high crime neighborhood, fill the vehicle with gasoline prior to entering the area, take a map, drive with the doors locked, and avoid stopping in unfamiliar areas.

7. While performing the site visit, keep the key readily accessible, and the vehicle nearby. If possible, for quick access.

8. Do not carry large amounts of cash on your person and do not give any money to pan handlers as this encourages others to approach you.



Kaiser Permanente Redwood City Medical Center
Address: 1100 Veterans Blvd, Redwood City, CA 94063
Phone: (650) 299-2000

From the Site head **East** on **Avenue Del Ora** toward **Jefferson Ave**;
Turn **Left** onto **Jefferson Ave**;
Turn **Right** onto **Veterans Blvd**;
Arrive at **1100 Veterans Blvd**, on **Right Hand** Side.
Estimated Distance: 1.7 Miles

Map to Nearest Hospital

John Gill School Expansion SMP
555 Avenue Del Ora
Redwood City, CA 94062

FIGURE D-1

McCloskey Consultants

Appendix E

Air Monitoring Protocol

APPENDIX E
AIR MONITORING PROTOCOL

The perimeter air samples will be collected using battery-operated pumps. The pumps will be calibrated with a field rotameter (secondary standard) that has been previously calibrated with a primary standard. The airflow will be calibrated prior to and at the conclusion of each sampling period using a representative filter cassette installed between the pump and the rotameter. Samples submitted to the laboratory for analysis will be given a unique sample number and recorded on chain of custody forms. The chain of custody forms will also include the location and activity pertaining to each sample, calibration flow rates before and following the sampling period, average flow rates, time of the sampling period, and the total volume.

All air samples will be submitted to an Environmental Protection Agency – National Institute of Standards for Testing (EPA-NIST) accredited laboratory that maintains proficiency in the American Industrial Hygiene Proficiency Analytical Testing (PAT) Program, and participates in the National Voluntary Laboratory Accreditation Program (NVLAP), for analysis.

Perimeter Air Sampling

The perimeter samples for asbestos fibers will be collected at an approximate flow rate sufficient to obtain a minimum sample volume of between 1,200 L and 2,000 L onto MCE filter membranes with a 0.45 µm pore size. The sample collection device will be 25-mm diameter fully assembled cassettes preloaded with the filters and including an open-faced extension cowl. The samples will be analyzed for asbestos by transmission electron microscopy (TEM) using EPA Asbestos Hazard Emergency Response Act (AHERA) criteria with the following exceptions:

- The analytical sensitivity shall be 0.0005 structures per cubic centimeter (s/cc); and
- All asbestos structures with an aspect ratio greater than three to one (3 to 1) shall be counted irrespective of length.

The analytical results will be reported as TEM asbestos structures per cubic centimeter (s/cc).

Perimeter Dust Monitoring

The perimeter dust monitoring will be performed using battery-operated direct-read monitors. The monitor will continuously record data for later analysis. The perimeter dust monitoring will be monitored at one upwind location and two downwind locations. The dust readings will be recorded on an hourly basis during the first day of each new field activity type. The perimeter dust monitors will be set to sound an alarm at the Site action level of 10 micrograms per cubic meter.

Appendix F

DTSC Advisory on Import Fill Material

Information Advisory
Clean Imported Fill Material

October 2001

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

It is DTSC's mission to restore, protect and enhance the environment, to ensure public health, environmental quality and economic vitality, by regulating hazardous waste, conducting and overseeing cleanups, and developing and promoting pollution prevention.

State of California

California Environmental Protection Agency

Executive Summary

This fact sheet has been prepared to ensure that inappropriate fill material is not introduced onto sensitive land use properties under the oversight of the DTSC or applicable regulatory authorities. Sensitive land use properties include those that contain facilities such as hospitals, homes, day care centers, and schools. This document only focuses on human health concerns and ecological issues are not addressed. It identifies those types of land use activities that may be appropriate when determining whether a site may be used as a fill material source area. It also provides guidelines for the appropriate types of analyses that should be performed relative to the former land use, and for the number of samples that should be collected and analyzed based on the estimated volume of fill material that will need to be used. The information provided in this fact sheet is not regulatory in nature, rather is to be used as a guide, and in most situations the final decision as to the acceptability of fill material for a sensitive land use property is made on a case-by-case basis by the appropriate regulatory agency.

Introduction

The use of imported fill material has recently come under scrutiny because of the instances where contaminated soil has been brought onto an otherwise clean site. However, there are currently no established standards in the statutes or regulations that address environmental requirements for imported fill material. Therefore, the California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) has prepared this fact sheet to identify procedures that can be used to minimize the possibility of introducing contaminated soil onto a site that requires imported fill material. Such sites include those that are undergoing site remediation, corrective action, and closure activities overseen by DTSC or the appropriate regulatory agency. These procedures may also apply to construction projects that will result in sensitive land uses. The intent of this fact sheet is to protect people who live on or otherwise use a sensitive land use property. By using this fact sheet as a guide, the reader will minimize the chance of introducing fill material that may result in potential risk to human health or the environment at some future time.

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website at www.dtsc.ca.gov.

Overview

Both natural and manmade fill materials are used for a variety of purposes. Fill material properties are commonly controlled to meet the necessary site specific engineering specifications. Because most sites requiring fill material are located in or near urban areas, the fill materials are often obtained from construction projects that generate an excess of soil, and from demolition debris (asphalt, broken concrete, etc.). However, materials from those types of sites may or may not be appropriate, depending on the proposed use of the fill, and the quality of the assessment and/or mitigation measures, if necessary. Therefore, unless material from construction projects can be demonstrated to be free of contamination and/or appropriate for the proposed use, the use of that material as fill should be avoided.

Selecting Fill Material

In general, the fill source area should be located in nonindustrial areas, and not from sites undergoing an environmental cleanup. Nonindustrial sites include those that were previously undeveloped, or used solely for residential or agricultural purposes. If the source is from an agricultural area, care should be taken to insure that the fill does not include former agricultural waste process byproducts such as manure or other decomposed organic material. Undesirable sources of fill material include industrial and/or commercial sites where hazardous ma-

Potential Contaminants Based on the Fill Source Area

Fill Source:	Target Compounds
Land near to an existing freeway	Lead (EPA methods 6010B or 7471A), PAHs (EPA method 8310)
Land near a mining area or rock quarry	Heavy Metals (EPA methods 6010B and 7471A), asbestos (polarized light microscopy), pH
Agricultural land	Pesticides (Organochlorine Pesticides: EPA method 8081A or 8080A; Organophosphorus Pesticides: EPA method 8141A; Chlorinated Herbicides: EPA method 8151A), heavy metals (EPA methods 6010B and 7471A)
Residential/acceptable commercial land	VOCs (EPA method 8021 or 8260B, as appropriate and combined with collection by EPA Method 5035), semi-VOCs (EPA method 8270C), TPH (modified EPA method 8015), PCBs (EPA method 8082 or 8080A), heavy metals including lead (EPA methods 6010B and 7471A), asbestos (OSHA Method ID-191)

**The recommended analyses should be performed in accordance with USEPA SW-846 methods (1996). Other possible analyses include Hexavalent Chromium: EPA method 7199*

Recommended Fill Material Sampling Schedule

Area of Individual Borrow Area	Sampling Requirements
2 acres or less	Minimum of 4 samples
2 to 4 acres	Minimum of 1 sample every 1/2 acre
4 to 10 acres	Minimum of 8 samples
Greater than 10 acres	Minimum of 8 locations with 4 subsamples per location
Volume of Borrow Area Stockpile	**Samples per Volume**
Up to 1,000 cubic yards	1 sample per 250 cubic yards
1,000 to 5,000 cubic yards	4 samples for first 1000 cubic yards +1 sample per each additional 500 cubic yards
Greater than 5,000 cubic yards	12 samples for first 5,000 cubic yards + 1 sample per each additional 1,000 cubic yards

terials were used, handled or stored as part of the business operations, or unpaved parking areas where petroleum hydrocarbons could have been spilled or leaked into the soil. Undesirable commercial sites include former gasoline service stations, retail strip malls that contained dry cleaners or photographic processing facilities, paint stores, auto repair and/or painting facilities. Undesirable industrial facilities include metal processing shops, manufacturing facilities, aerospace facilities, oil refineries, waste treatment plants, etc. Alternatives to using fill from construction sites include the use of fill material obtained from a commercial supplier of fill material or from soil pits in rural or suburban areas. However, care should be taken to ensure that those materials are also uncontaminated.

Documentation and Analysis

In order to minimize the potential of introducing contaminated fill material onto a site, it is necessary to verify through documentation that the fill source is appropriate and/or to have the fill material analyzed for potential contaminants based on the location and history of the source area. Fill documentation should include detailed information on the previous use of the land from where the fill is taken, whether an environmental site assessment was performed and its findings, and the results of any testing performed. It is recommended that any such documentation should be signed by an appropriately licensed (CA-registered) individual. If such documentation is not available or is inadequate, samples of the fill material should be chemically analyzed. Analysis of the fill material should be based on the source of the fill and knowledge of the prior land use.

Detectable amounts of compounds of concern within the fill material should be evaluated for risk in accordance with the DTSC Preliminary Endangerment Assessment (PEA) Guidance Manual. If

metal analyses are performed, only those metals (CAM 17 / Title 22) to which risk levels have been assigned need to be evaluated. At present, the DTSC is working to establish California Screening Levels (CSL) to determine whether some compounds of concern pose a risk. Until such time as these CSL values are established, DTSC recommends that the DTSC PEA Guidance Manual or an equivalent process be referenced. This guidance may include the Regional Water Quality Control Board's (RWQCB) guidelines for reuse of non-hazardous petroleum hydrocarbon contaminated soil as applied to Total Petroleum Hydrocarbons (TPH) only. The RWQCB guidelines should not be used for volatile organic compounds (VOCs) or semi-volatile organic compounds (SVOCS). In addition, a standard laboratory data package, including a summary of the QA/QC (Quality Assurance/Quality Control) sample results should also accompany all analytical reports.

When possible, representative samples should be collected at the borrow area while the potential fill material is still in place, and analyzed prior to removal from the borrow area. In addition to performing the appropriate analyses of the fill material, an appropriate number of samples should also be determined based on the approximate volume or area of soil to be used as fill material. The table above can be used as a guide to determine the number of samples needed to adequately characterize the fill material when sampled at the borrow site.

Alternative Sampling

A Phase I or PEA may be conducted prior to sampling to determine whether the borrow area may have been impacted by previous activities on the property. After the property has been evaluated, any sampling that may be required can be determined during a meeting with DTSC or appropriate regulatory agency. However, if it is not possible to analyze the fill material at the borrow area or determine that it is appropriate for use via a Phase I or PEA, it is recommended that one (1) sample per truckload be collected and analyzed for all compounds of concern to ensure that the imported soil is uncontaminated and acceptable. (See chart on Potential Contaminants Based on the Fill Source Area for appropriate analyses). This sampling frequency may be modified upon consultation with the DTSC or appropriate regulatory agency if all of the fill material is derived from a common borrow area. However, fill material that is not characterized at the borrow area will need to be stockpiled either on or off-site until the analyses have been completed. In addition, should contaminants exceeding acceptance criteria be identified in the stockpiled fill material, that material will be deemed unacceptable and new fill material will need to be obtained, sampled and analyzed. Therefore, the DTSC recommends that all sampling and analyses should be completed prior to delivery to the site to ensure the soil is free of contamination, and to eliminate unnecessary transportation charges for unacceptable fill material.

Composite sampling for fill material characterization may or may not be appropriate, depending on quality and homogeneity of source/borrow area, and compounds of concern. Compositing samples for volatile and semivolatile constituents is not acceptable. Composite sampling for heavy metals, pesticides, herbicides or PAH's from unanalyzed stockpiled soil is also unacceptable, unless it is stockpiled at the borrow area and originates from the same source area. In addition, if samples are composited, they should be from the same soil layer, and not from different soil layers.

When very large volumes of fill material are anticipated, or when larger areas are being considered as borrow areas, the DTSC recommends that a Phase I or PEA be conducted on the area to ensure that the borrow area has not been impacted by previous activities on the property. After the property has been evaluated, any sampling that may be required can be determined during a meeting with the DTSC.

For further information, call Richard Coffman, Ph.D., R.G., at (818) 551-2175.

Appendix K
Water Pipeline Safety Hazard Assessment

PLACEWORKS

TECHNICAL MEMORANDUM

DATE December 13, 2017

TO C. John Dominguez
President

School Site Solutions, Inc.
2015 H Street
Sacramento, California 95811

FROM Steve Bush, P.E., Senior Engineer

SUBJECT John Gill Elementary School Water Pipeline Safety Hazard Assessment
SSI-02.0

1. Introduction

PlaceWorks was retained by School Site Solutions, Inc., on behalf of the Redwood City School District, to conduct a Water Pipeline Safety Hazard Assessment (WSHPA) for John Gill Elementary School in the City of Redwood City. The San Francisco Public Utilities Commission (SFPUC) Hetch Hetchy water pipeline easement that contains three 60- to 66- inch water pipelines and five additional large volume (12-inch diameter) water pipelines were identified within 1,500 feet of the school site. The WPSHA evaluates potential flooding impacts to the school site, and was conducted as required by California Code of Regulations (CCR), Title 5, Section 14010(h).

1.1 PROJECT LOCATION

The school site is located at 555 Avenue Del Ora in Redwood City, in San Mateo County, California. The school is bounded by Avenue Del Ora to the south, Jefferson Avenue to the east, Myrtle Street to the north, and residences to the west. The Redwood City School District (District) proposes the replacement of existing school facilities and extension of parking and drop off areas in the southern portion of the school site. The planned development area (project site) within the existing school site is shown on Figure 1. The 60-foot wide Hetch Hetchy pipeline easement is located along the southern portion of the project site beneath the existing school parking lot and Avenue Del Ora (Figure 2).

2. Water Pipeline Safety Hazard Assessment

2.1 REGULATORY REQUIREMENTS

Under Education Code Section 17251, the California Department of Education (CDE) has authority to approve acquisition of proposed school sites. The school district must obtain CDE approval for sites to receive state funds under the state's School Facilities Program administered by the State Allocation Board. CDE standards and regulations for this process are presented in CCR, Title 5, Sections 14010,

14011, and 14012. Information on assessing safety hazard related to pipelines is discussed in Section 14010 (h):

> *The site shall not be located near an above-ground water or fuel storage tank or within 1,500 feet of the easement of an above-ground or underground pipeline that can pose a safety hazard as determined by a risk analysis study, conducted by a competent professional, which may include certification from a local public utility commission.*

No high pressure natural gas pipelines or hazardous liquid pipelines were identified within 1,500 feet of the school site.[1] The CDE's School Site Selection and Approval Guide also contain provisions for evaluating high-pressure water pipelines:[2]

> *To ensure the protection of students, faculty, and school property if the proposed school site is within 1,500 feet of the easement of an aboveground or underground pipeline that can pose a safety hazard, the school district should obtain the following information from the pipeline owner and operator:*

- *Pipeline alignment, size, type of pipe, depth of cover,*
- *Operating water pressures in pipelines near the proposed school site,*
- *Estimated volume of water that might be released from the pipeline should a rupture occur on the site, and*
- *Owner's assessment of the structural condition of the pipeline.*

2.2 ASSESSMENT METHODOLOGY

To meet the requirements of CCR Title 5 Sections 14010 (d) and (h) and CDE's policy on pipelines, this WPSHA is designed to meet the following objectives:

- Identify all high pressure/high volume water pipelines within 1,500 feet of the proposed school site and evaluate the potential for flooding, and
- Where appropriate, identify and develop mitigation measures to reduce flooding impacts to acceptable levels.

The CDE has developed risk analysis procedures for evaluating flooding associated with releases from large diameter water pipelines, as described in CDE's Guidance Protocol for School Site Pipeline Risk

[1] McCloskey Consultants, Inc., 2017. *CDE/CCR Title 5 Geologic and Safety Hazards Evaluation for John Gill School, 555 Avenue Del Ora, Redwood City, San Mateo County, California.* Dated August 2017.

[2] California Department of Education (CDE), 2000. Resources for School Facilities Planning, School Selection and Approval Guide. Prepared by School Facilities Planning Division, CDE, Sacramento, CA.

Analysis.[3] A safety issue associated with large diameter water pipelines is the potential for flooding. Also, releases from underground water pipelines can cause subterranean erosion of saturated soil, leading to subsidence or formation of a sinkhole. The most likely cause of failure is a large magnitude earthquake and associated strong ground shaking.

Although no specific criteria have been established by the CDE as a threshold of significance for flooding at a school site, a water depth of 12 inches or greater is a trigger that could warrant further evaluation.[4]

2.3 PIPELINE LOCATION AND OPERATIONAL DATA

Based on plans provided from the City of Redwood City, Department of Public Works, Water Department (RCDPW) and the SFPUC, there are eight high volume (≥12 inch diameter) water pipelines within 1,500 feet of the project site, and summarized in Table 1.

Table 1 Water Pipelines

Pipeline Diameter	Pipeline Location	Material of construction	Agency
66-Inch	Hetch Hetchy Easement, Bay Division Pipeline (BDPL) No. 2	Welded Steel	San Francisco Public Utilities Commission (SFPUC)
60-Inch	Hetch Hetchy Easement, BDPL No. 1	Riveted Steel	SFPUC
60-Inch	Hetch Hetchy Easement, BDPL No. 5	Welded Steel	SFPUC
12-Inch	Madison Avenue	Polyvinyl Chloride	City of Redwood City, Department of Public Works, Water Department (RCDPW)
12-Inch	Red Morton Park, east of Vera Avenue	Polyvinyl Chloride	RCDPW
12-Inch	Valota Road	Polyvinyl Chloride	RCDPW
12-Inch	James Avenue	Cast Iron	RCDPW
12-Inch	Myrtle Avenue	Polyvinyl Chloride	RCDPW

SFPUC's Bay Division Pipelines (BDPLs) No. 1, No. 2 and No. 5 are located within the 60-foot wide easement along the southern portion of the site.[5] The alignment of the pipelines within the Hetch

[3] California Department of Education (CDE), 2007. Guidance Protocol for School Site Pipeline Risk Analysis, Prepared by URS Corporation. Dated February 2007.

[4] Ibid.

[5] San Francisco Public Utilities Commission, 2017. SFPUC Response to PlaceWorks Information Request. Dated November 28, 2017.

Hetchy easement is shown on Figure 2. BDPL No. 1 crosses within the planned development area at the southeastern corner of the project site. BDPL No. 2 is one to three feet south of the planned development area, and BDPL No. 5 is approximately 20 feet south of the site. The remaining 12-inch water mains identified within 1,500 feet of the project site are shown on Figure 1.

The Hetch Hetchy Aqueduct serves as a potable water transmission and distribution system serving 2.6 million customers along the pipeline route in San Francisco, San Mateo, Santa Clara, Alameda, and Tuolumne Counties.[6] BDPL No. 1 is a 60-inch riveted steel pipeline constructed between 1923 and 1926. BDPL No. 2 is a 66-inch welded steel, concrete-wrapped pipeline constructed between 1934 and 1936. BDPL No. 5 is a 60-inch welded steel pipeline constructed in 2009 as part of SFPUC's regional Water System Improvement Program (WSIP) to increase the system's ability to withstand major seismic events and prolonged droughts and to meet water purchase requests in the service area through 2030.[7] The pipelines are buried approximately 5 feet below ground surface (bgs) near the project site. The pipelines are periodically inspected through three separate programs, based on a risk assessment approach. The inspections are based on pipeline age, previously reported pipeline conditions, availability of pipeline (whether it is drained), operational issues, potential liabilities, and the rate of degradation observed in prior inspections.[8]

2.4 WATER PIPELINE FLOODING ANALYSIS

The CDE requires that the risk of releases from high volume ($\geq$12 inches) water pipelines be evaluated. The CDE Guidance Protocol for School Pipeline Risk Analysis provides a methodology for evaluating the potential for flooding. A probability analysis is not required.

Because four of the identified eight water pipelines identified in Table 1 are located beneath streets, a pipeline flooding analysis was conducted for these pipelines to determine the depth and location of water flow within the street in the event of a pipeline leak or rupture. For this worst-case analysis, it was conservatively assumed that all of the water flowing through the pipelines at their maximum capacity would reach the surface. In addition, no credit was taken for the presence of storm drains along these streets.

Release impacts were calculated based on the procedures specified in the CDE manual. The release rate was determined by multiplying the pipe area by an assumed velocity of 5 feet per second (fps).

---

[6] San Francisco Public Utilities Commission, 2013. Historic American Engineering Record, Bay Crossing Reach of the Bay Division Pipelines Nos. 1 and 2 (Hetch Hetchy Aqueduct), HAER No. CA-366. Prepared by URS Corporation.

[7] San Francisco Planning Department, 2006. Notice of Preparation for Bay Division Pipeline Reliability Upgrade Project. Dated June 2, 2006.

[8] San Francisco Public Utilities Commission, 2016. *State of Regional Water System, Hetch Hetchy Regional Water System*. Dated September 2016.

Then the release rate was compared to the carrying capacity of the street, taking into account longitudinal slope, to determine if the water would be contained within the confines of the street curbing.[9] The results are provided in Table 2.

Table 2 Street Flow

Pipeline Diameter	Pipeline Location	Release Rate (cfs)	Street Width (ft)	Depth of Flow in Street (in)	Exceeds Street Carrying Capacity?
12-inch	Madison Avenue	3.93	30	3.3	No
12-inch	Valota Road	3.93	30	3.6	No
12-inch	James Avenue	3.93	30	2.9	No
12-inch	Myrtle Street	3.93	30	3.6	No

Assuming a standard 6-inch curb for residential streets, the water released from a full-flow rupture of any of the water mains would be entirely contained within the confines of the curbing and would not result in flooding at the school site.

For the water pipelines located in easements or right-of-ways with no curbing, the modeling approach from the CDE guidance manual assumes that all of the released water at a maximum flow rate reaches the surface and forms a circular pool with a water depth of 12 inches. The results are provided in Table 3.

Table 3 Surface Pooling

Pipeline Diameter	Pipeline Location	Release Rate (cfs)	Impact Distance for Circular Pool (ft)	Distance from School Site (ft)	Potentially Impacts School Site?
66-inch	Hetch Hetchy Easement	118.8	213 (106.5 ft radius)	1 to 3 ft	Yes
60-inch	Hetch Hetchy Easement	98.2	194 (97 ft radius)	On-site	Yes
60-Inch	Hetch Hetchy Easement	98.2	194 (97 ft radius)	20 ft	Yes
12-inch	Red Morton Park, east of Vera Avenue	3.93	39 (19.5 ft radius)	940 ft	No

The calculations show that a release from the 12-inch water main beneath Red Morton Park, east of Vera Avenue, would not impact the school site. However, a release from either of the pipelines within the Hetch Hetchy easement could potentially impact the school site. Assuming the formation of a

[9] Jeffers & Associates, 2006. Modified Manning's Equation Solver. Version 3.0.

circular pool, water from the 66-inch BDPL No. 2 would extend 106.5 feet from the pipeline location and water from the 60-inch BDPL No. 1 would extend 97 feet from the pipeline location. However, this analysis does not take into account site topography and flow direction at the school site, which is discussed in further detail below. For this worst-case analysis, it also was conservatively assumed that all of the water flowing through the pipelines at their maximum capacity would reach the surface. Given that the pipeline is buried approximately 5 feet bgs, only a portion of the water released from the pipelines would reach the surface.[10]

Based on the site topography, the elevation gradient is such that released water from any of the 60- and 66-inch water pipelines would not flow toward the school site. There is a topographic high (small knoll) to the west of the school site, as shown in Appendix A, with a flow direction in the area of the school site to the south and southeast. Additionally, the nearest existing school buildings in the southern portion of the school site are elevated approximately two to five feet higher than Avenue del Ora with a gentle slope down to where the easement and water pipelines are located. Therefore, released water would not flow onto the school site at this location. There also is a low concrete block wall next to the sidewalk that would prevent water from flowing toward the existing buildings and the existing parking and drop off areas. Therefore, students and staff would not be adversely impacted in the unlikely event of a water pipeline break.

In the existing site configuration, the nearest permanent building (Annex Building) within the planned development area is 34 feet from BDPL No. 1. In the proposed site configuration, the parking lot and student drop-off areas will be extended along the southern portion of the project site fronting Avenue Del Ora, nearest to the SFPUC pipelines (Appendix A). Therefore, the new classroom buildings would be an additional 16 feet farther away from BDPL No. 1 in the proposed site configuration (i.e., 50 feet from this pipeline). Therefore, impacts from a rupture of BDPL No. 1 or any of the water supply pipelines to the school site would be reduced compared to the existing site configuration due to the increased setback distance to classroom buildings.

[10] San Francisco Public Utilities Commission, 2017. SFPUC Response to PlaceWorks Information Request. Dated November 28, 2017.

3. Conclusions

If a rupture or leak should occur in any of the Hetch Hetchy water supply pipelines or water mains within 1,500 feet of the school site, the results of the flooding analysis indicate that the released water would not result in water depths at the school site that would pose a significant risk to students and staff. In addition, the proposed site configuration would place classroom buildings further away from the south property line and SFPUC water pipelines, which would further reduce risks.

Even though the impact of pipeline releases was found to be less than significant, it is recommended that the school's emergency response and evacuation plan address the possibility of water pipeline releases and identify potential evacuation routes. Also, contact names and numbers for the water agencies (San Francisco Public Utilities Commission and City of Redwood City, Department of Public Works, Water Department) should be maintained with the emergency response plan in case the school needs to report pipeline releases. A map of the pipeline locations and emergency contact information should be kept with the school's emergency response plan.

In summary, a potential break in any of the water pipelines located within 1,500 feet of the site would not result in significant flooding at the project site.

Respectfully submitted,

PlaceWorks

Steve Bush, PE
Senior Engineer



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Source: Google Earth Pro, 2017

Figure 1
School Site and Pipeline Map



Source: Google Earth Pro, 2017

Figure 2
Hetch-Hetchy Pipeline Map

Appendix A – Water Analysis

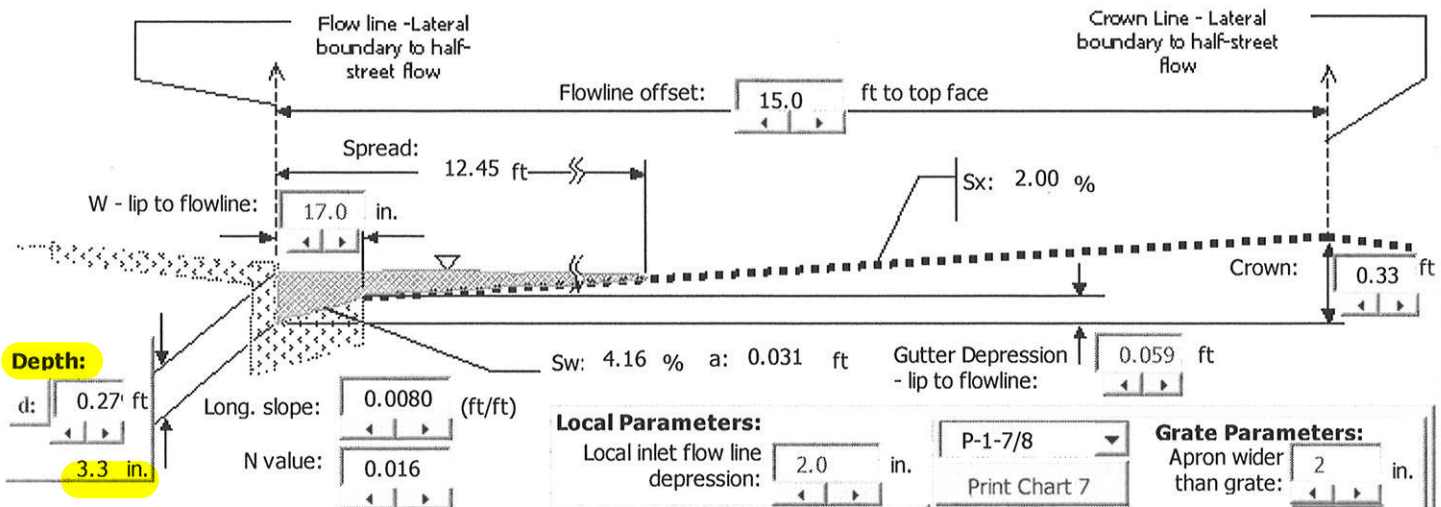
Modified Manning's Equation Solver

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Print | Save | Quit

Parameters | Composite Triangular Sections | Head - Discharge Table | Assumptions | Inlet Geometry | Disclaimer



Street Parameters:

Q:	3.93	cfs
K:	43.9	
Vel:	2.50	ft/s
Eo:	29.7	%
W/T:	0.1137	

Standard Manning's:

Q:	3.23	cfs
K:	36.1	
Vel:	2.06	ft/s
Rh:	0.12	ft
Area:	1.57	sf

Local Parameters:

Local inlet flow line depression: 2.0 in.

Curb Opening Parameters:

C-O Apron wider than gutter: 0 in.

S'w 13.9 % Se: 6.14 %

Length of curb opening inlet: 12.0 ft

Lt: 15.97 ft

80 % Clear Efficiency 80.9 %

Curb opening flowby: 0.75 cfs

P-1-7/8

Print Chart 7

Grate Parameters:

Apron wider than grate: 2 in.

Length: 48 in. Width: 22 in.

% Factor 50 % Factor 50

Splash-over Vel: 11.58 ft/s Vel over grate: 2.58 ft/s

Eo: 98.74 %

Rs: 11.04 % Rf: 100.00 %

Side flow captured: 0.04 cfs Frontal captured: 0.37 cfs

Total combined CB flowby: 0.34 cfs

Street Flow - Madison Avenue
12-Inch Water Main

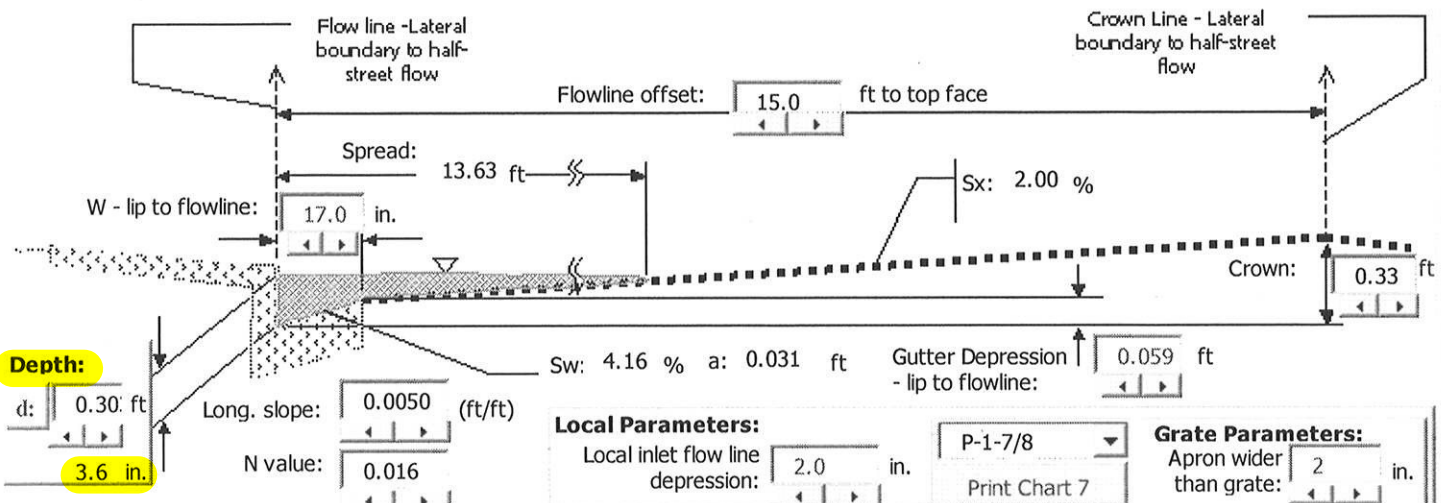
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Parameters | Composite Triangular Sections | Head - Discharge Table | Assumptions | Inlet Geometry | Disclaimer



Street Parameters:

Q:	3.93	cfs
K:	55.6	
Vel:	2.10	ft/s
Eo:	27.3	%
W/T:	0.1040	

Standard Manning's:

Q:	3.23	cfs
K:	45.7	
Vel:	1.72	ft/s
Rh:	0.13	ft
Area:	1.87	sf

Local Parameters:

Local inlet flow line depression: 2.0 in.

Curb Opening Parameters:

C-O Apron wider than gutter: 0 in.

S'w 13.9 % Se: 5.80 %

Length of curb opening inlet: 12.0 ft

Lt: 14.36 ft

80 % Clear Efficiency 86.3 %

Curb opening flowby: 0.54 cfs

P-1-7/8

Print Chart 7

Grate Parameters:

Apron wider than grate: 2 in.

Length: 48 in. Width: 22 in.

% Factor 50 % Factor 50

Splash-over Vel: 11.58 ft/s Vel over grate: 1.98 ft/s

Eo: 99.55 %

Rs: 16.00 % Rf: 100.00 %

Side flow captured: 0.04 cfs Frontal captured: 0.27 cfs

Total combined CB flowby: 0.23 cfs

Street Flow - Valota Road and Myrtle Street
12-Inch Water Main

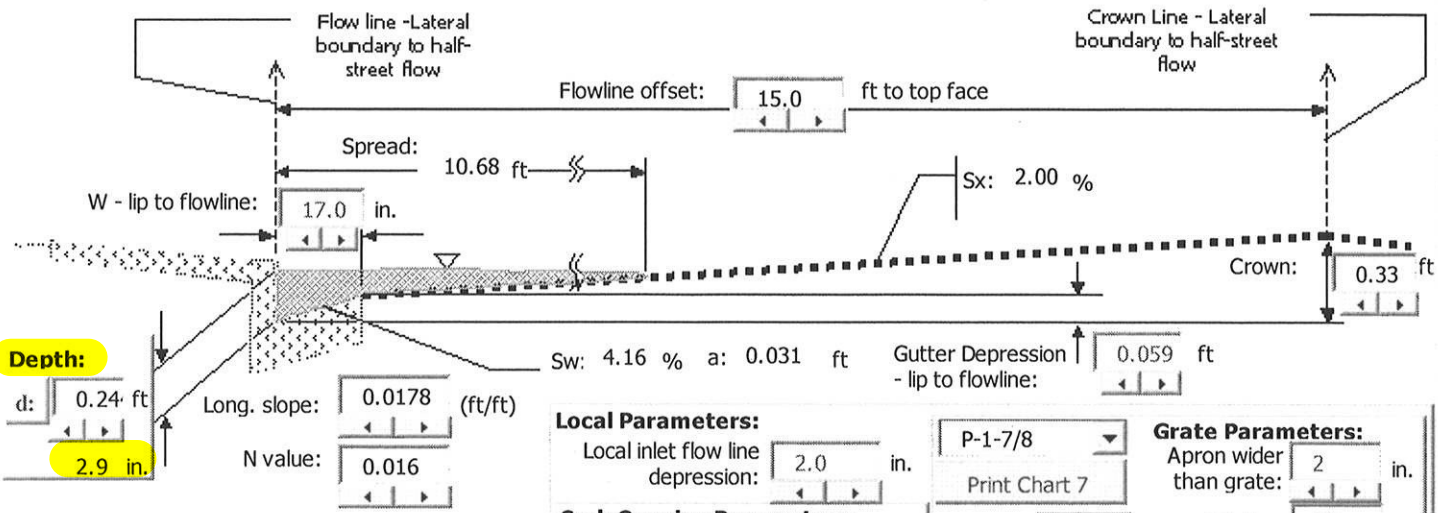
Modified Manning's Equation Solver

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Print | Save | Quit

Parameters | Composite Triangular Sections | Head - Discharge Table | Assumptions | Inlet Geometry | Disclaimer



Local Parameters:

Local inlet flow line depression: 2.0 in.

Curb Opening Parameters:

C-O Apron wider than gutter: 0 in.

S'w 13.9 % Se: 6.79 %

Length of curb opening inlet: 12.0 ft

Lt: 19.12 ft

80 % Clear Efficiency 71.5 %

Curb opening flowby: 1.12 cfs

P-1-7/8

Print Chart 7

Grate Parameters:

Apron wider than grate: 2 in.

Length: 48 in. Width: 22 in.

% Factor 50 % Factor 50

Splash-over Vel: 11.58 ft/s Vel over grate: 3.84 ft/s

Eo: 98.76 %

Rs: 5.70 % Rf: 100.00 %

Side flow captured: 0.03 cfs Frontal captured: 0.55 cfs

Total combined CB flowby: 0.53 cfs

Street Parameters:

Q: 3.93 cfs

K: 29.5

Vel: 3.39 ft/s

Eo: 34.4 %

W/T: 0.1327

Standard Manning's:

Q: 3.22 cfs

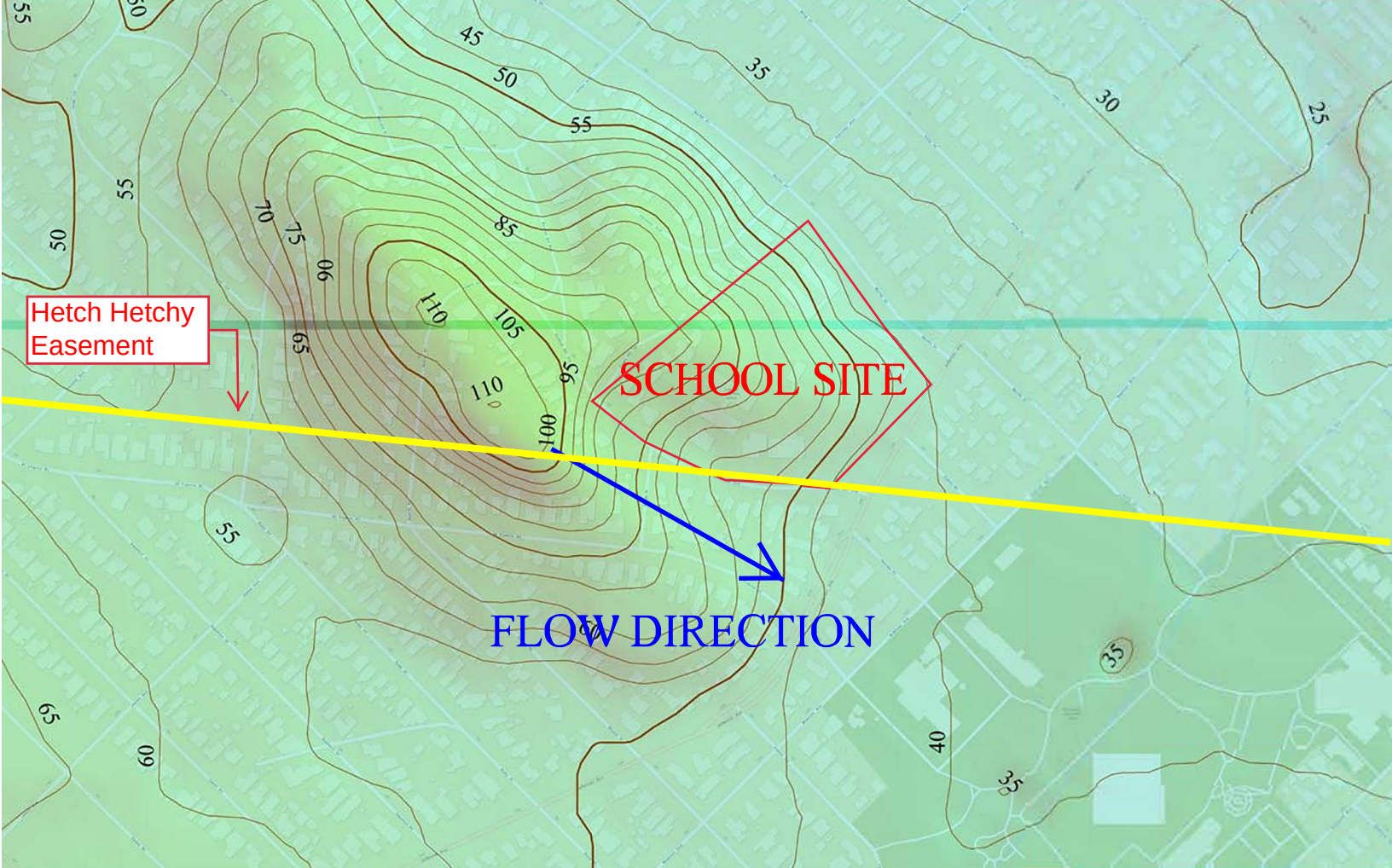
K: 24.1

Vel: 2.78 ft/s

Rh: 0.11 ft

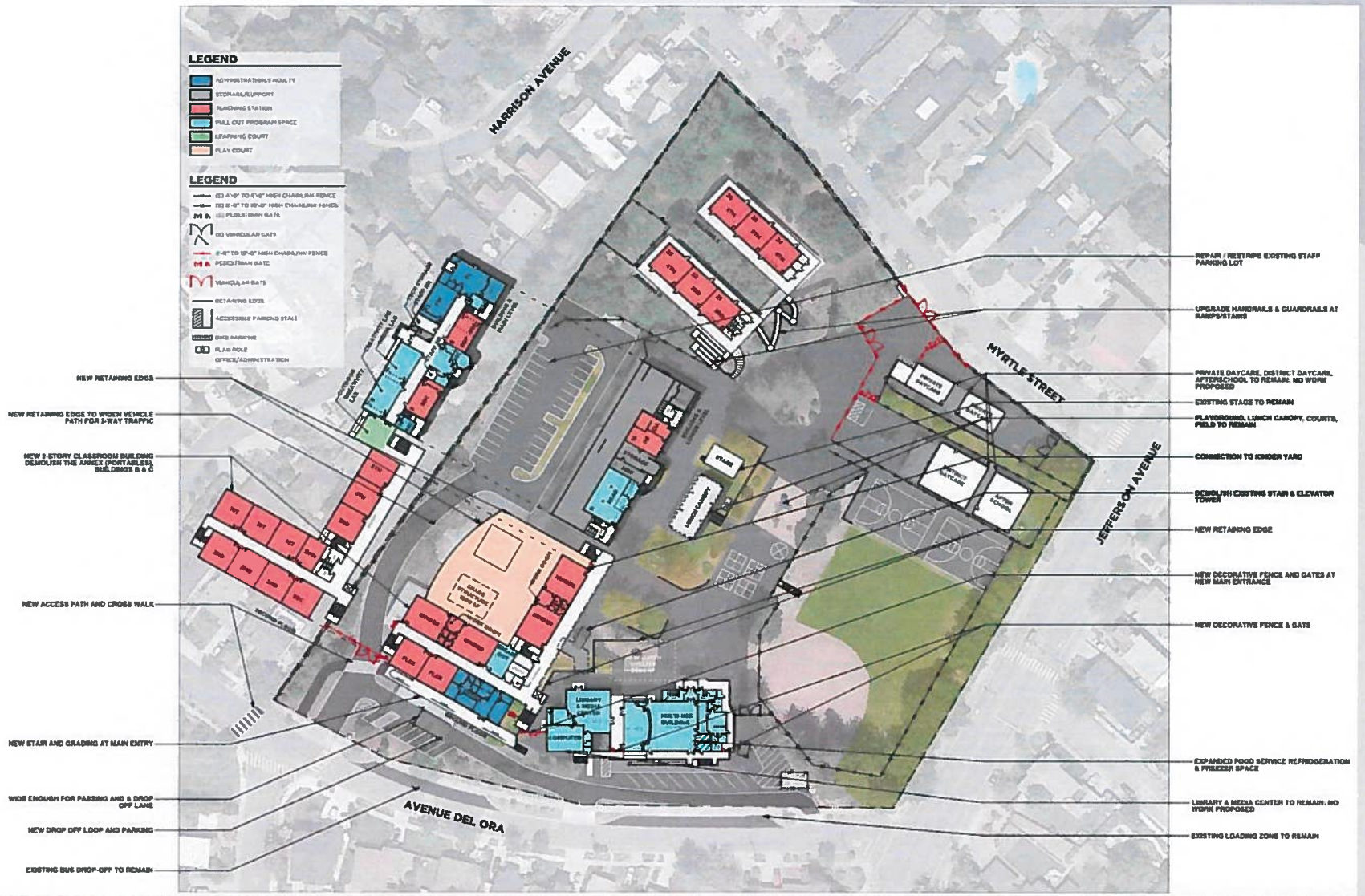
Area: 1.16 sf

Street Flow - James Avenue
12-Inch Water Main


Hetch Hetchy
Easement
SCHOOL SITE
FLOW DIRECTION

John Gill School

Cody Anderson Wasney Architects Conceptual Design Phase 1 Site Plan



Appendix B – Agency Correspondence

San Francisco
Water Power Sewer
Operator of the Hetch Hetchy Regional Water System

Water Supply & Treatment Division
1000 El Camino Real
Millbrae, CA 94030-0730
T 650.872-5900
F 650.872-5984

November 28, 2017

Ms. Alexis Whitaker, Project Scientist
PLACEWORKS
1625 Shattuck Ave, Suite 300
Berkeley, CA 94709

Subject: Utility Information Request for Bay Division Pipeline No.1, No.2 & No.5 in Redwood City

Dear Ms. Whitaker,

In response to your letter dated November 22, 2017 requesting for utility information within the proposed project areas, I am attaching a copy of drawings E-711, E-712, E-2336, E-5166 and E-17054 to E-17062 showing the locations of SFPUC's Bay Division Pipelines No.1, No. 2 and No.5 on our pipeline right-of-way. The drawings showing SFPUC pipeline sizes and approximate locations are for your reference only. **Exact location and depth of pipelines must be verified by potholing.**

If you need to work within the SFPUC rights-of-way, Please apply for a revocable permit or consent from Ms. Stacie Feng at (650) 871-2037.

Sincerely,

Jonathan Chow, P.E.
Manager, Maintenance Engineering

JC: SC
File

Edwin M. Lee
Mayor

Francesca Vietor
President

Anson Moran
Vice President

Ann Moller Caen
Commissioner

Vince Courtney
Commissioner

Ike Kwon
Commissioner

Harlan L. Kelly, Jr.
General Manager

Appendix L
Final Transportation Impact Study Report

Final Transportation Impact Study Report

John Gill Community School

Redwood City, California

January 29, 2018

TJKM

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EXECUTIVE SUMMARY

This report summarizes the results of the Traffic Impact Study (TIS) conducted for the modernized John Gill Community School located at 555 Avenue Del Ora, Redwood City on the northwest corner of the intersection of Jefferson Avenue and Avenue Del Ora in Redwood City, California. The purpose of this traffic impact study is to evaluate the potential traffic impacts resulting from the development of the proposed project on the surrounding transportation system.

The project proposes to construct a two-story classroom and office building, modernization of the existing buildings and major site improvements to create a new campus entrance along Avenue Del Ora. The proposed scope of work includes demolishing three existing classroom wings to replace with a new two-story classroom and administrative office building (approximately 21,600 square feet + 9,000 square feet exterior circulation). The proposed modernization scope includes upgrading finishes, systems and technology in buildings, support 21st century learning.

The maximum enrollment for the school is 440 students with approximately 44 teachers and staff. The schools may have year-round schedules (August-July) and serves students from the local area. The physical facilities are slated to include standard educational facilities including classrooms, library, offices, playgrounds, and parking lot. The hours of operation of school is from 8:15 a.m. to 1:30 p.m. for Kindergartens. For Grades 1-5, operating hours are from 8:15 a.m. to 2:40 p.m., Monday through Friday except Thursday. On Thursday, there will be an early dismissal for all the students. After school activities and events will also occur. John Gill School has a Day Care Facility, After School Programs and operating hours vary from 7:00 a.m. to 600 p.m. on all days. The drop off/pick-up locations are provided in front of the school, which is accessible through Avenue Del Ora. Also, Bus Loading area is provided on Avenue Del Ora. Access to the school is through Avenue Del Ora, and Myrtle Street.

The report also includes evaluations and recommendations concerning project site access and on-site circulation for vehicles, bicycles, and pedestrians; evaluation of on-site vehicle parking supply.

To evaluate the impacts on the transportation infrastructure due to the addition of traffic from the proposed project, two study intersections were evaluated during the weekday a.m., midday, and p.m. peak hour under two study scenarios. The study intersections were evaluated under *Existing No Project* and Existing *plus Project* scenarios. For the purposes of this analysis, potential traffic operational effects from the proposed project are identified based on established traffic operational thresholds of City of Redwood City.

Project Trip Generation

The proposed project is expected to generate 515 daily vehicular trips in which 158 weekday a.m. peak hour trips (87 inbound trips, 71 outbound trips) and 53 weekday p.m. peak hour trips (26 inbound trips, 27 outbound trips).TJKM applied 20 percent trip discounts to the proposed project for buses, pedestrian and bicycle uses.

Existing Conditions

Under this scenario, stop controlled intersections, i.e. Avenue Del Ora/Jefferson Avenue and Myrtle Street/Jefferson Avenue, which operates at LOS F during the a.m., and p.m. peak hours. These

intersections operates at LOS D/E during the midday peak hour, which is within the applicable jurisdictional standards of City of Redwood City (LOS D).

Existing plus Project Conditions

Under this scenario, stop controlled intersections i.e. Avenue Del Ora/Jefferson Avenue and Myrtle Street/Jefferson Avenue, which operates at LOS F during the a.m., and p.m. peak hours. These intersections operates at LOS D/E during the midday peak hour, which is within the applicable jurisdictional standards of City of Redwood City (LOS D).

Based on the City of Redwood City impact criteria the project is expected to have a less-than-significant impact at all the study intersections.

Pedestrian, Bicycle and Transit Impacts

Pedestrian access to the site will be via existing sidewalks on Jefferson Avenue, Avenue Del Ora, St. Francis Street, Myrtle Street, and Hawes Street along both sides within the project vicinity. The proposed project does not conflict with existing and planned pedestrian or bicycle facilities and will add very few trips to existing transit facilities, which can be accommodated by the existing transit capacity. Therefore, there will be no degrading of pedestrian, bicycle, or transit facilities related to the school operations.

On-Site Circulation

TJKM examined the project site plan in order to evaluate the adequacy of on-site vehicle circulation including vans and emergency vehicles. Based on the evaluation, the proposed on-site vehicle circulation is very adequate and should not result in any significant traffic operations issues. On-site queueing is expected to be minimal.

Parking

The City of Redwood City Municipal Code requires schools, enrolling students in the tenth (10th) grade or below shall provide one space for each classroom and administrative office, plus one space for every 100 square feet in the auditorium. Based on the City's requirements, 22 parking spaces are required for John Gill School. The project proposes to provide 45 parking spaces, which includes 5 accessible stalls (4 accessible van stalls, and 1 standard accessible stalls). The ample supply of on-site parking will ensure that there are no parking impacts. The project also proposes a designated drop-off zones on Avenue Del Ora. There should be minimal impact on the adjoining neighborhood either from a circulation or parking standpoint.

INTRODUCTION

This report summarizes the results of the Transportation Impact Study (TIS) conducted for the proposed John Gill Community School located at 555 Avenue Del Ora on the northwest corner of the intersection of Avenue Del Ora and Jefferson Avenue in Redwood City, CA.

The project proposes to construct a two-story classroom and office building, modernization of the existing buildings and major site improvements to create a new campus entrance along Avenue Del Ora. The proposed scope of work includes demolishing three existing classroom wings to replace with a new two-story classroom and administrative office building (approximately 21,600 square feet + 9,000 square feet exterior circulation). The proposed modernization scope includes upgrading finishes, systems and technology in buildings, support 21st century learning.

The maximum enrollment for the elementary school is 440 students with approximately 44 teachers and staff. The schools may have year-round schedules (August-July) and serves students from the local area. The physical facilities are slated to include standard educational facilities including classrooms, library, offices, playgrounds, and parking lot. The hours of operation of school is from 8:15 a.m. to 1:30 p.m. for Kindergartens. For Grades 1-5, operating hours are from 8:15 a.m. to 2:40 p.m., Monday through Friday except Thursday. On Thursday, there will be an early dismissal for all the students. After school activities and events will also occur. John Gill School has a Day Care Facility, After School Programs and operating hours vary from 7:00 a.m. to 600 p.m. on all days. The drop off/pick-up locations are provided in front of the school, which is accessible through Avenue Del Ora. Also, Bus Loading area is provided on Avenue Del Ora. Access to the school is through Avenue Del Ora, and Myrtle Street.

This chapter discusses the TIA purpose, project study area, analysis scenarios and levels of service methodology, and criteria used to identify significant impacts.

STUDY INTERSECTIONS AND SCENARIOS

TJKM evaluated traffic conditions at two study intersections during the a.m., midday and p.m. peak hours of a typical weekday. The peak period observed was between 7:00 a.m. - 9:00 a.m., 1:00 p.m. – 3:00 p.m., and 4:00 p.m. – 6:00 p.m. The highest single one-hour period recorded for the peak period is used in the analysis. The study periods, intersections and analysis were reviewed and selected by the City of Redwood Staff. The study intersections and associated traffic controls are as follows:

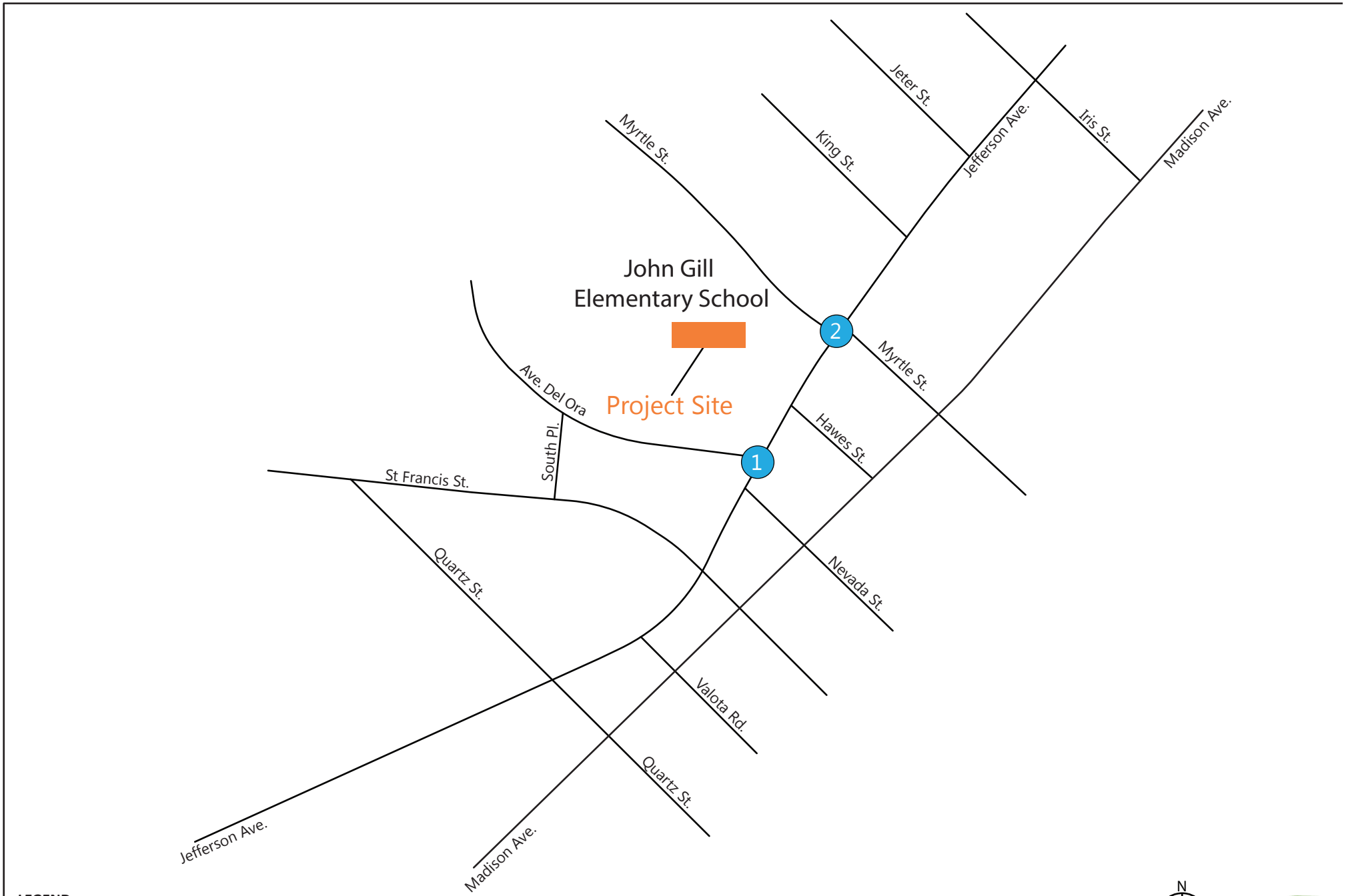
1. Avenue Del Ora and Jefferson Avenue (One-Way Stop)
2. Myrtle Street and Jefferson Avenue (Two-Way Stop)

Figure 1 illustrates the study intersections and the vicinity map of the proposed project. **Figure 2** shows the proposed project site plan.

This study addresses the following two traffic scenarios:

- **Existing Conditions** – This scenario evaluates all the study locations based on existing traffic volumes, lane geometry and traffic controls.
- **Existing plus Project Conditions**– This scenario is identical to Existing Conditions, but with the addition of traffic from the proposed project.

Vicinity Map



Project Site Plan



Figure 2

STUDY METHODOLOGY

This section describes the methods used to determine the traffic conditions for each scenario described above. It includes descriptions of the data requirements, the analysis methodologies, and the applicable level of service standards.

LEVEL OF SERVICE ANALYSIS METHODOLOGY

Level of Service (LOS) is a qualitative measure that describes operational conditions as they relate to the traffic stream and perceptions by motorists and passengers. The LOS generally describes these conditions in terms of such factors as speed and travel time, delays, freedom to maneuver, traffic interruptions, comfort, convenience and safety. The operational LOS are given letter designations from A to F, with A representing the best operating conditions (free-flow) and F the worst (severely congested flow with high delays). Intersections generally are the capacity-controlling locations with respect to traffic operations on arterial and collector streets.

Signalized Intersections

The study intersections under traffic signal control were analyzed using the 2000 HCM Operations Methodology for signalized intersections described in Chapter 16 (HCM 2000). This methodology determines LOS based on average control delay per vehicle for the overall intersection during peak hour intersection operating conditions. The LOS methodology is approved and adopted by the City of Redwood City. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. **Table 1** summarizes the relationship between the control delay and LOS for signalized intersections. The LOS methodology is described for Signalized intersections in detail in **Appendix A**.

Unsignalized Intersections

The study intersections under stop control (unsignalized) were analyzed using the 2000 HCM Operations Methodology for unsignalized intersections described in Chapter 17 (HCM 2000). LOS ratings for stop-sign controlled intersections are based on the average control delay expressed in seconds per vehicle. At the side street, stop controlled intersections or two-way stop sign intersections; the control delay is calculated for each movement, not for the intersection as a whole. For approaches composed of a single lane, the control delay is computed as the average of all movements in that lane. The weighted average delay for the entire intersections is presented for all-way stop controlled intersections. **Table 2** summarizes the relationship between delay and LOS for unsignalized intersections. The delay ranges for unsignalized intersections are lower than for signalized intersections as drivers expect less delay at unsignalized intersections.

Each of the study intersections was analyzed using Synchro Version 9 software and HCM 2000 methodology. The LOS assessment under all scenarios is based on current traffic controls. The LOS methodology is described for unsignalized intersections in detail in **Appendix A**.

Table 1: Level of Service Definitions for Signalized Intersections

Level of Service	Description
A	Very low control delay, up to 10 seconds per vehicle. Progression is extremely favorable, and most vehicles arrive during the green phase. Many vehicles do not stop at all. Short cycle lengths may tend to contribute to low delay values.
B	Control delay greater than 10 and up to 20 seconds per vehicle. There is good progression or short cycle lengths or both. More vehicles stop causing higher levels of delay.
C	Control delay greater than 20 and up to 35 seconds per vehicle. Higher delays are caused by fair progression or longer cycle lengths or both. Individual cycle failures may begin to appear. Cycle failure occurs when a given green phase does not serve queued vehicles, and overflow occurs. The number of vehicles stopping is significant, though many still pass through the intersection without stopping.
D	Control delay greater than 35 and up to 55 seconds per vehicle. The influence of congestions becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volumes. Many vehicles stop, the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	Control delay greater than 55 and up to 80 seconds per vehicle. The limit of acceptable delay. High delays usually indicate poor progression, long cycle lengths, and high volumes. Individual cycle failures are frequent.
F	Control delay in excess of 80 seconds per vehicle. Unacceptable to most drivers. Oversaturation, arrival flow rates exceed the capacity of the intersection. Many individual cycle failures. Poor progression and long cycle lengths may also be contributing factors to higher delay.

Source: Highway Capacity Manual 2000

Table 2: Level of Service Definitions for Stop-Controlled Intersections

Level of Service	Description
A	Very low control delay less than 10 seconds per vehicle for each movement subject to delay.
B	Low control delay greater than 10 and up to 15 seconds per vehicle for each movement subject to delay.
C	Acceptable control delay greater than 15 and up to 25 seconds per vehicle for each movement subject to delay.
D	Tolerable control delay greater than 25 and up to 35 seconds per vehicle for each movement subject to delay.
E	Limit of tolerable control delay greater than 35 and up to 50 seconds per vehicle for each movement subject to delay.
F	Unacceptable control delay in excess of 50 seconds per vehicle for each movement subject to delay.

Source: Highway Capacity Manual 2000

Significant Impact Criteria and Level of Service Standards

The study intersections are located within City of Redwood City jurisdictions. LOS significance criteria are described for each jurisdiction below.

City of Redwood City

The City of Redwood City General Plan contains the following transportation policy with respect to level of service:

- Program BE-55 / Level of Service Policy Evaluation: Evaluate Redwood City's current Level of Service (LOS) policies for motor vehicle circulation. The evaluation shall consider the following to ensure efficient traffic flow and balance multi-modal mobility goals.
- Maintaining LOS D or better for motor vehicles in all areas of the city, except the Downtown area as defined by the Downtown Precise Plan. In Downtown, no minimum vehicular LOS standard will be maintained but vehicular LOS will be calculated and alternate LOS standards for other travel modes will be established.

In addition, as documented in the recent Stanford in Redwood City DEIR and consistent with other recent Redwood City EIRs, common City practice has been to consider traffic impacts at a study intersection as significant if the project or project plus cumulative development would cause:

- Operations at a signalized intersection to deteriorate from an acceptable level (LOS D or better) to an unacceptable level (LOS E or F); or
- Average delay at a signalized intersection operating at an unacceptable level (LOS E or F) to increase by five (5) or more seconds; or
- Operations at an unsignalized intersection to deteriorate from an acceptable level (LOS D or better) to an unacceptable level (LOS E or F); or
- Delay at an unsignalized intersection operating at an unacceptable level (LOS E or F) to increase by five or more seconds; and
- Traffic volumes at the intersection satisfy the Caltrans Peak Hour Volume Signal Warrant for traffic signal installation.

EXISTING CONDITIONS

This section describes existing conditions in the immediate project site vicinity, including roadway facilities, bicycle and pedestrian facilities, and available transit service. In addition, existing traffic volumes and operations are presented for the study intersections, including the results of LOS calculations.

EXISTING SETTING AND ROADWAY SYSTEM

Important roadways adjacent to the project site are discussed below:

Regional roadway facilities providing access to the John Gill School include State Route 82 (SR 82/El Camino Real) and State Route 84 (SR 84/Woodside Road). Local roadways providing access include Jefferson Avenue, Avenue Del Ora, Myrtle Street, South Place and St. Francis Street. Descriptions of each roadway facility are presented below.

State Route 82 (SR 82, El Camino Real) is a north-south, six-lane arterial that extends from San Francisco southerly to San Jose. Between Whipple Avenue and Woodside Road (SR 84) in Redwood City, the facility consists of four travel lanes.

Jefferson Avenue is a two-to four-lane north-south arterial roadway that begins at Farm Hill Boulevard and extends to Veterans Boulevard. The posted speed limit within the project vicinity is 30 mph. This roadway provides local access to residential land uses and schools. On Street parking is available on both the sides of the roadway near the project vicinity.

Avenue Del Ora is a two lane east-west local roadway, extending from Jefferson Avenue to James Avenue. The posted speed limit within the project vicinity is 25 mph. This roadway provides local access to residential land uses and schools. Project access is provided on this roadway.

Myrtle Street is a two lane east-west local roadway, extending from Jefferson Avenue to Whipple Avenue. The posted speed limit within the project vicinity is 25 mph. This roadway provides local access to residential land uses and schools. Project access is provided on this roadway.

South Place is a two lane north-south local roadway, extending from Avenue Del Ora to St. Francis Street. The posted speed limit within the project vicinity is 25 mph. This roadway provides local access to residential land uses.

St. Francis Street is a two lane east-west local roadway, extending from Jefferson Avenue to Harding Avenue. The posted speed limit within the project vicinity is 25 mph. This roadway provides local access to residential land uses.

REDWOOD CITY SAFE ROUTES TO SCHOOL REPORT

The Redwood City Safe Route to School Report, August 2013, reviewed six schools, including John Gill Elementary and identified potential infrastructure projects and education and encouragement programs that could improve student safety and support walking and biking to school and identified and promote suggested walking and biking routes for students and parents to and from school. The findings and recommendations in the report were reviewed for consistency with the analysis for this report.

EXISTING PEDESTRIAN FACILITIES

Walkability is defined as the ability to travel easily and safely between various origins and destinations without having to rely on automobiles or other motorized travel. The ideal "walkable" community includes wide sidewalks, a mix of land uses such as residential, employment, and shopping opportunities, a limited number of conflict points with vehicle traffic, and easy access to transit facilities and services.

Pedestrian facilities consist of crosswalks, sidewalks, pedestrian signals, and off-street paths, which provide safe and convenient routes for pedestrians to access the destinations such as institutions, businesses, public transportation, and recreation facilities.

In the project vicinity, study intersections are controlled by stop control. Crosswalks are provided on Avenue Del Ora and Myrtle Street.

There are continuous sidewalks present on Jefferson Avenue, Avenue Del Ora, St. Francis Street, Myrtle Street, and South Place along both sides within the project vicinity. All the existing sidewalks are approximately 5 to 12 feet wide varying along the project area. There is adequate street lighting in the vicinity.

The existing pedestrian facilities in the study area are shown in **Figure 3.** Existing peak hour pedestrian counts are provided in **Appendix B.**

EXISTING BICYCLE FACILITIES

Bicycle facilities include the following:

- Bike Paths (Class I) – Paved trails that are separated from roadways
- Bike Lanes (Class II) – Lanes on roadways designated for use by bicycles through striping, pavement legends, and signs
- Bike Routes (Class III) – Designated roadways for bicycle use by signs or other markings which may or may not include additional pavement width for cyclists

Currently there is a Class III bicycle route provided on Jefferson Avenue and Myrtle Street along both sides of the roadway in the vicinity of the project site. The San Mateo County Comprehensive Bicycle and Pedestrian Plan proposes future designation of Jefferson Avenue has Class II facilities within the study area. There are adequate signage/markings for the bicyclists to maneuver without confusion.

The existing bicycle facilities in the study area are shown in **Figure 4.** Existing peak hour bicycle counts are provided in **Appendix B.**

EXISTING TRANSIT FACILITIES

SamTrans operates the bus services in Redwood City. There is only one bus service operating in the immediate vicinity of the project site. Route 274 provides access to the project site. There are five bus stops in the immediate vicinity of the project site; all the bus stops are located on Jefferson Avenue.

Route 274 is a City route that provides weekday and weekend service between Canada College and the Redwood Transit Center. The route provides service between 6:12 a.m. and 10:12 p.m. during weekdays

and between 8:05 a.m. and 7:15 p.m. during weekends. The route services stops along Jefferson Avenue in the project vicinity.

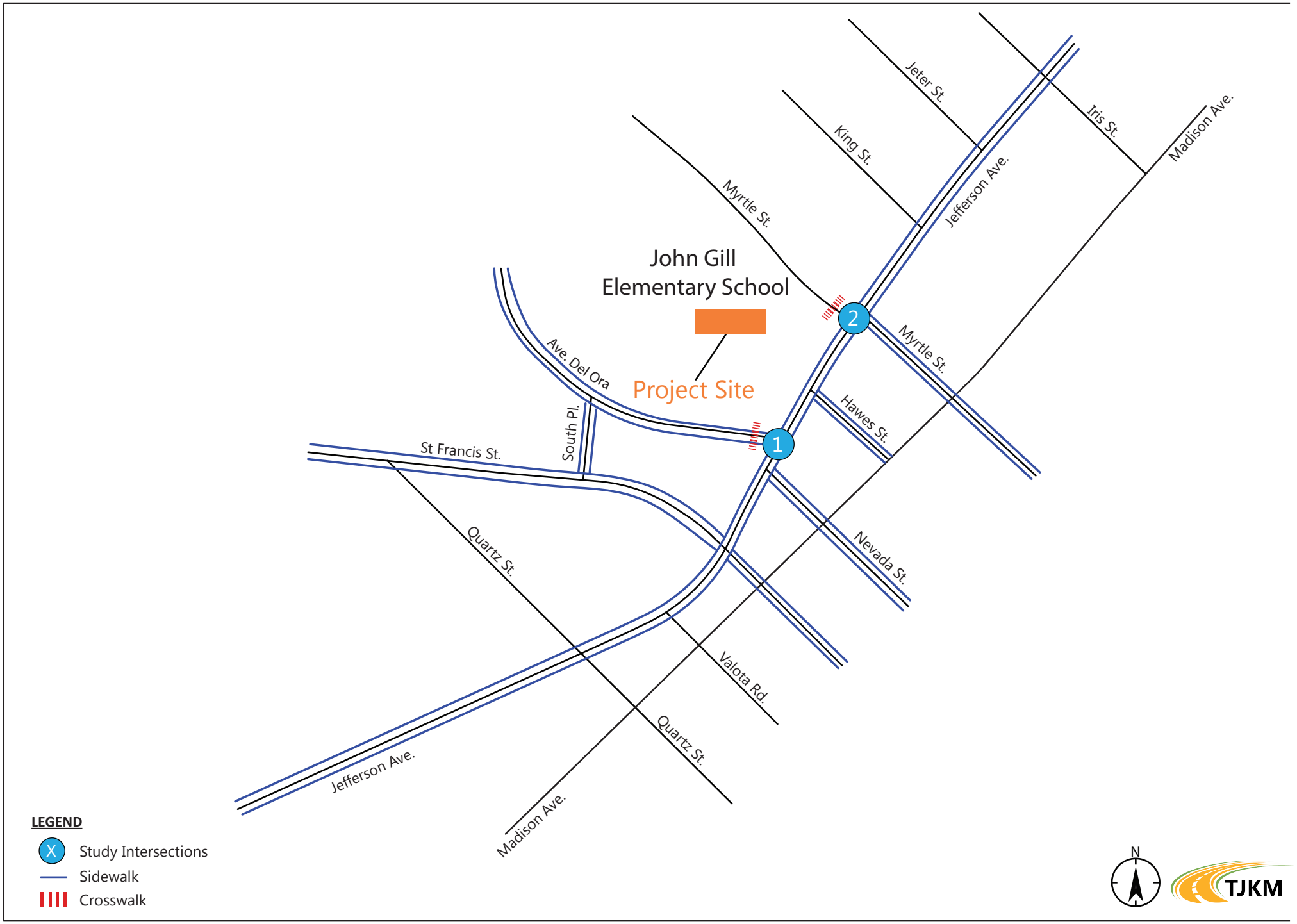
Table 3 describes the services and frequency for the transit services. The existing transit facilities in the study area are shown in **Figure 5.**

Table 3: Existing Transit Services

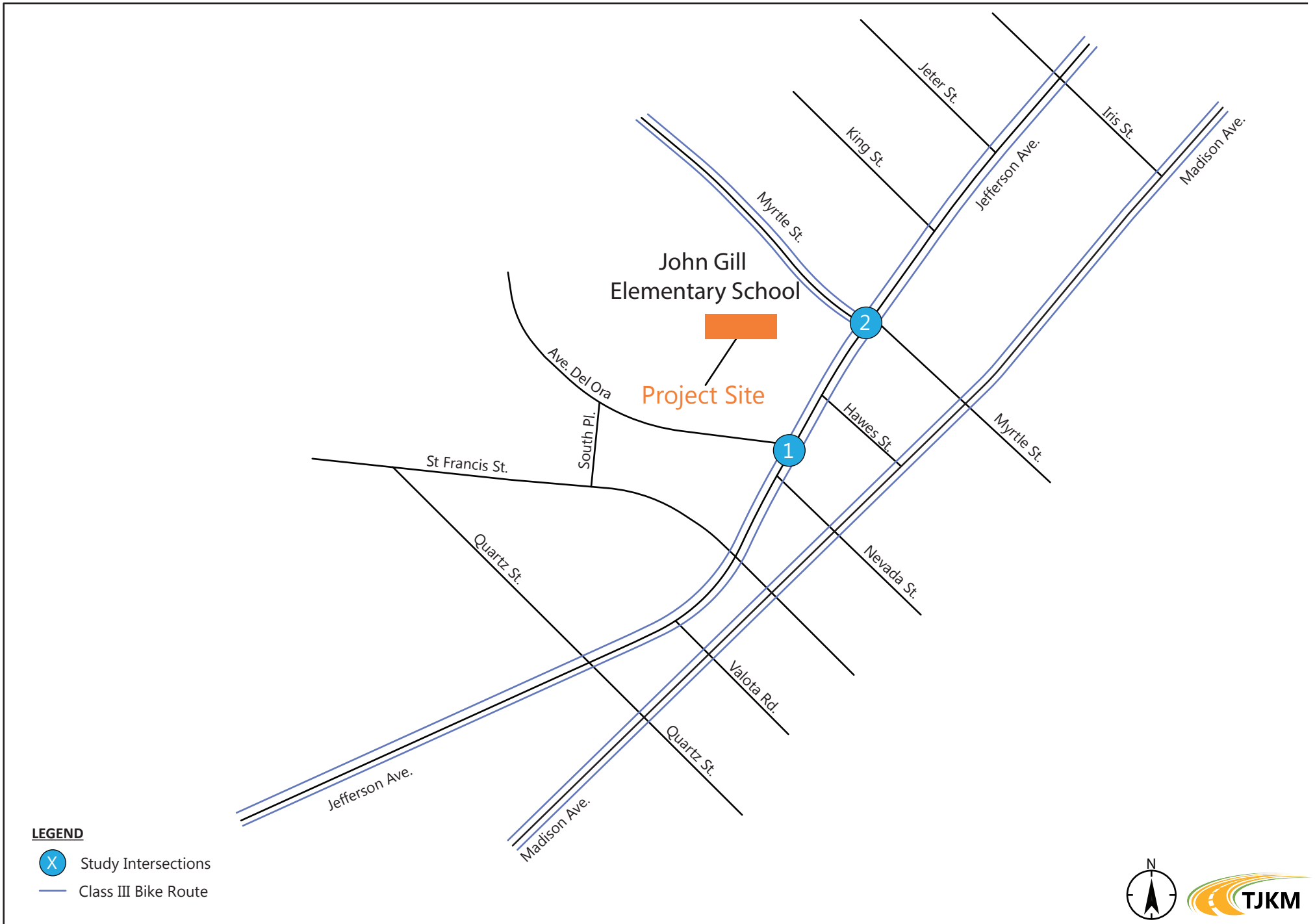
Route #	From	To	Weekdays		Weekend	
			Operating Hours	Headway (minutes)	Operating Hours	Headway (minutes)
274	Canada College	Redwood City Transit Center	6:12 a.m. – 10:12 p.m.	30-60	8:05 a.m. – 7:15 p.m.	60

Source: www.samtrans.com

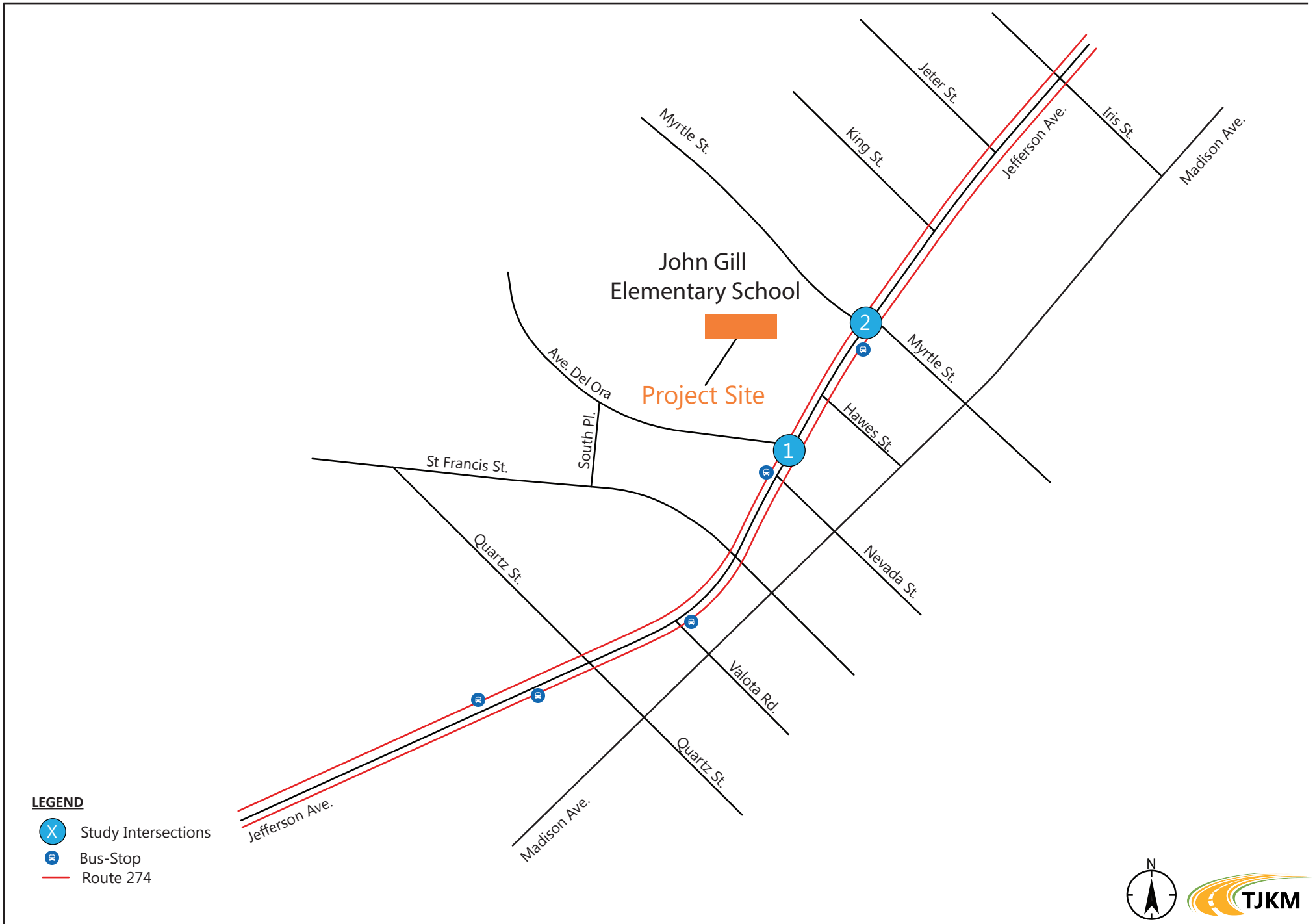
Existing Pedestrian Facilities



Existing Bicycle Facilities



Existing Transit Facilities



Existing Intersection Volumes and Lane Configurations

The existing operations of the study intersections were evaluated for the highest one-hour volume during the weekday morning, midday and evening peak periods. Turning movement counts for vehicles, bicycles, and pedestrians were conducted during typical weekday a.m. peak period (7:00-9:00 a.m.), midday peak period (1:00-3:00 p.m.) and p.m. peak period (4:00-6:00 p.m.) at the study intersections on Thursday, October 5th, 2017. **Appendix B** includes all the data sheets for the collected vehicle, bicycle, and pedestrian counts. **Figure 6** illustrates the existing lane geometry and traffic control at the study intersections. **Figure 7** illustrates the existing conditions peak hour traffic volumes at the study intersections.

Existing Parking Conditions

John Gill Community School has 45 parking stalls on-site. Parking is provided for teachers, administrative staff, visitors, and students. On street parking is allowed on Avenue Del Ora, Jefferson Avenue, and Myrtle Street during the school operation hours.

Field Observations

TJKM conducted the field observations within the vicinity of John Gill School. Drop-off & Pick-up locations is situated in front of the main entrance building i.e. on Avenue Del Ora. Vehicles, Buses can access through this route to drop/pick the children. Visitors and staff vehicles have to access the driveways situated on Avenue Del Ora. Parents also drop off/pick up the children on Myrtle Street, though this not a designated zone for drop off and pick up. During the school operational hours, the traffic on Jefferson Avenue is relatively high and there are queues observed near the intersection of Jefferson Avenue and St. Francis Street. Jefferson Avenue has narrow sidewalks with limited buffer from the vehicle traffic. The crosswalks at Avenue Del Ora and Myrtle Street, and the signalized intersection at Jefferson Avenue and Hawes Street have faded crosswalks, but seem to operate.

The drop off and pick up times are times with peak congestion, but only during the 15 to 30 minutes prior to school beginning and ending.

INTERSECTION LEVEL OF SERVICE ANALYSIS – EXISTING CONDITIONS

Existing intersection lane configurations and peak hour turning movement volumes were used to calculate the levels of service for the study intersections during each peak hour. The peak hour factor based on the counts was used for all study intersections for the existing conditions analysis.

The study intersections were analyzed using the 2000 Highway Capacity Manual (HCM 2000) methodology by using Synchro 9.0 software program. The results of the Level of Service (LOS) analysis using the Synchro 9.0 software program for Existing Conditions are summarized in **Table 4**. **Appendix C** contains the corresponding calculation sheets.

Under this scenario, the study intersections Avenue Del Ora/Jefferson Avenue and Myrtle Street/Jefferson Avenue, which operates at LOS F during the a.m., and p.m. peak hours. During the midday peak hour, all the intersections operate within City of Redwood City standards Level of Service (LOS) D or better.

Table 4: Intersection Level of Service Analysis – Existing Conditions

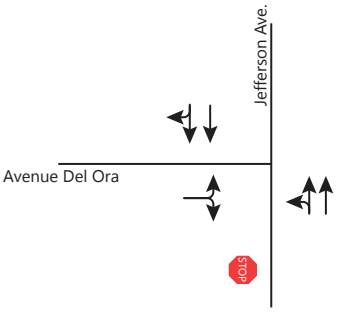
#	Study Intersection	Control	Peak Hour[1]	Average Delay[2]	LOS[3]
1	Avenue Del Ora/Jefferson Avenue	One-Way Stop	AM	**176.7**	**F**
			Midday	34.4	D
			PM	**59.2**	**F**
2	Myrtle Street/Jefferson Avenue	Two-Way Stop	AM	**68.1**	**F**
			Midday	31.6	D
			PM	**83.4**	**F**

Notes:
[1]AM – morning peak hour (between 7 and 9 a.m.), Midday-midday peak hour (between 1 and 3 p.m.), and PM-evening peak hour (between 4 and 6 p.m.)
[2]Total control delay for the worst movement is presented for side-street stop-controlled intersections.
[3]LOS – Level of Service calculations conducted using the Synchro 9.0 level of service analysis software package, which applies the methodology described in the 2000 HCM.
Bold text indicates intersection operates at a deficient Level of Service.

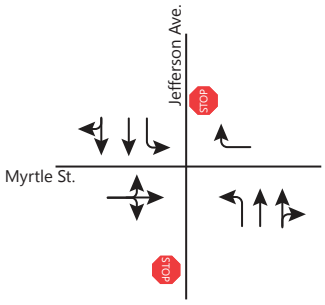
The peak-hour signal warrant from the California Manual of Uniform Traffic Control Devices (CA MUTCD) was evaluated for the unsignalized intersections that operates unacceptably under Existing Conditions to determine if a traffic signal is warranted. The unsignalized intersections, Avenue Del Ora / Jefferson Avenue (#1), and Myrtle Street / Jefferson Avenue (#2) doesn't meet MUTCD peak hour signal warrants in both the a.m. and p.m. peak hours. MUTCD peak hour signal warrants sheets for Existing Conditions are contained in **Appendix C**.

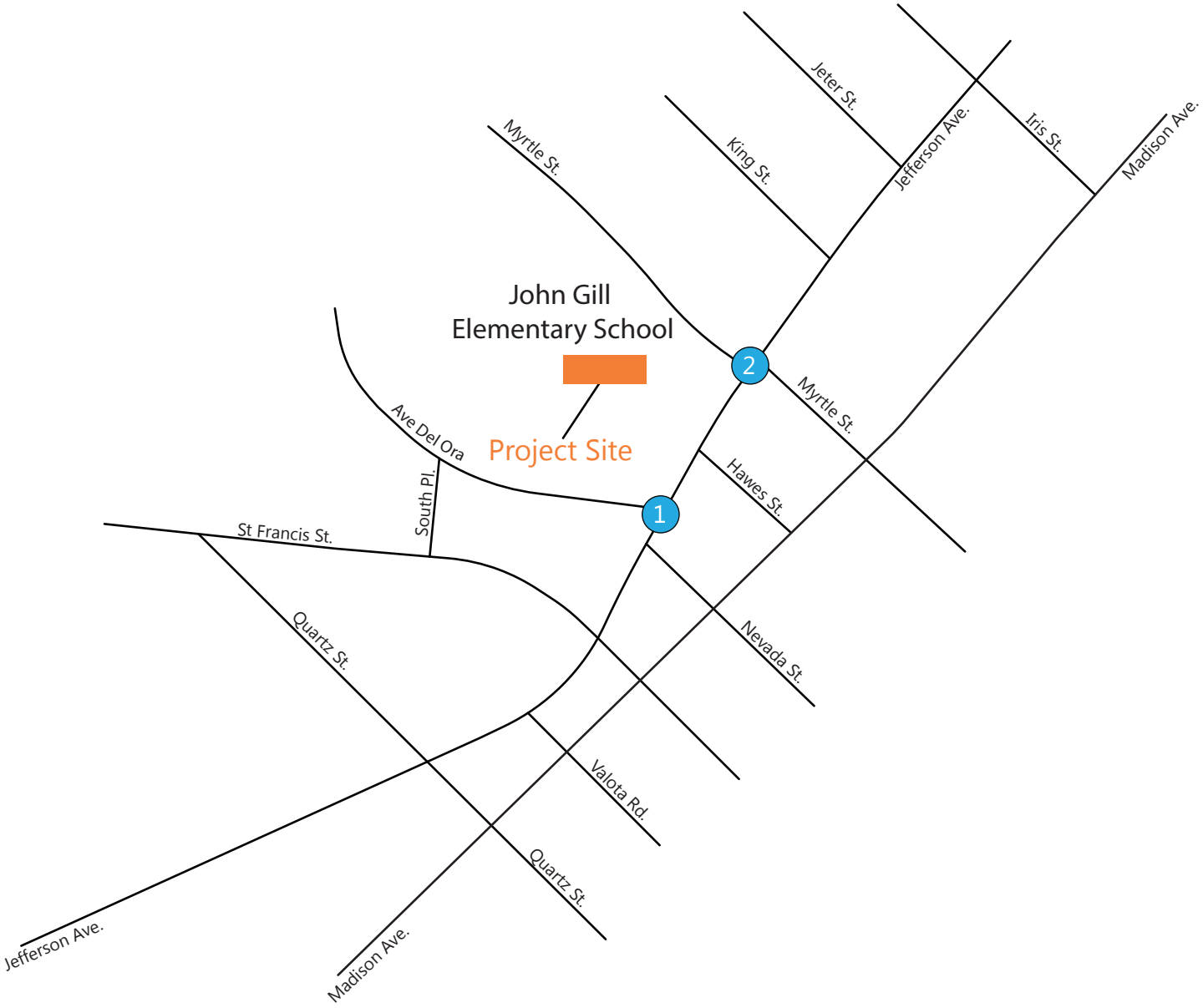
Existing Conditions Lane Geometry and Traffic Controls

Intersection #1
Jefferson Ave. / Avenue Del Ora



Intersection #2
Middlefield Rd. / Fifth Ave.





LEGEND

X Study Intersections

STOP Stop Signs

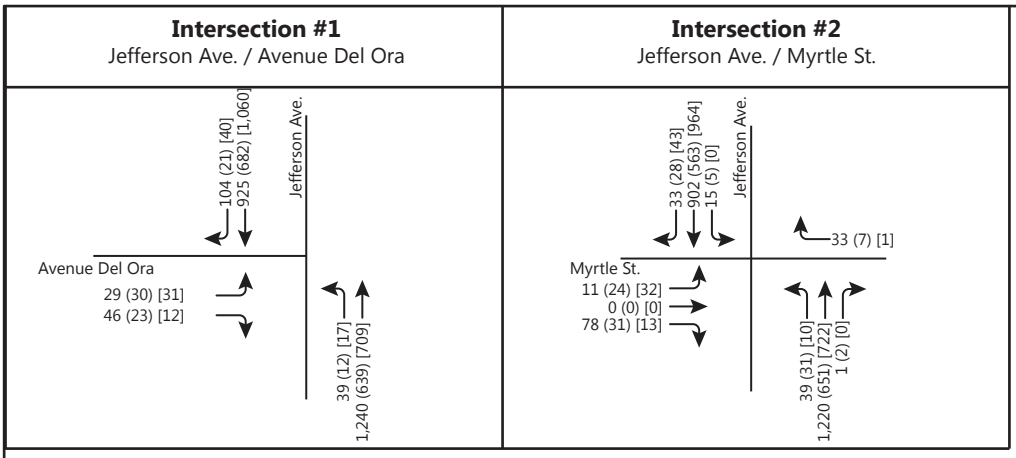
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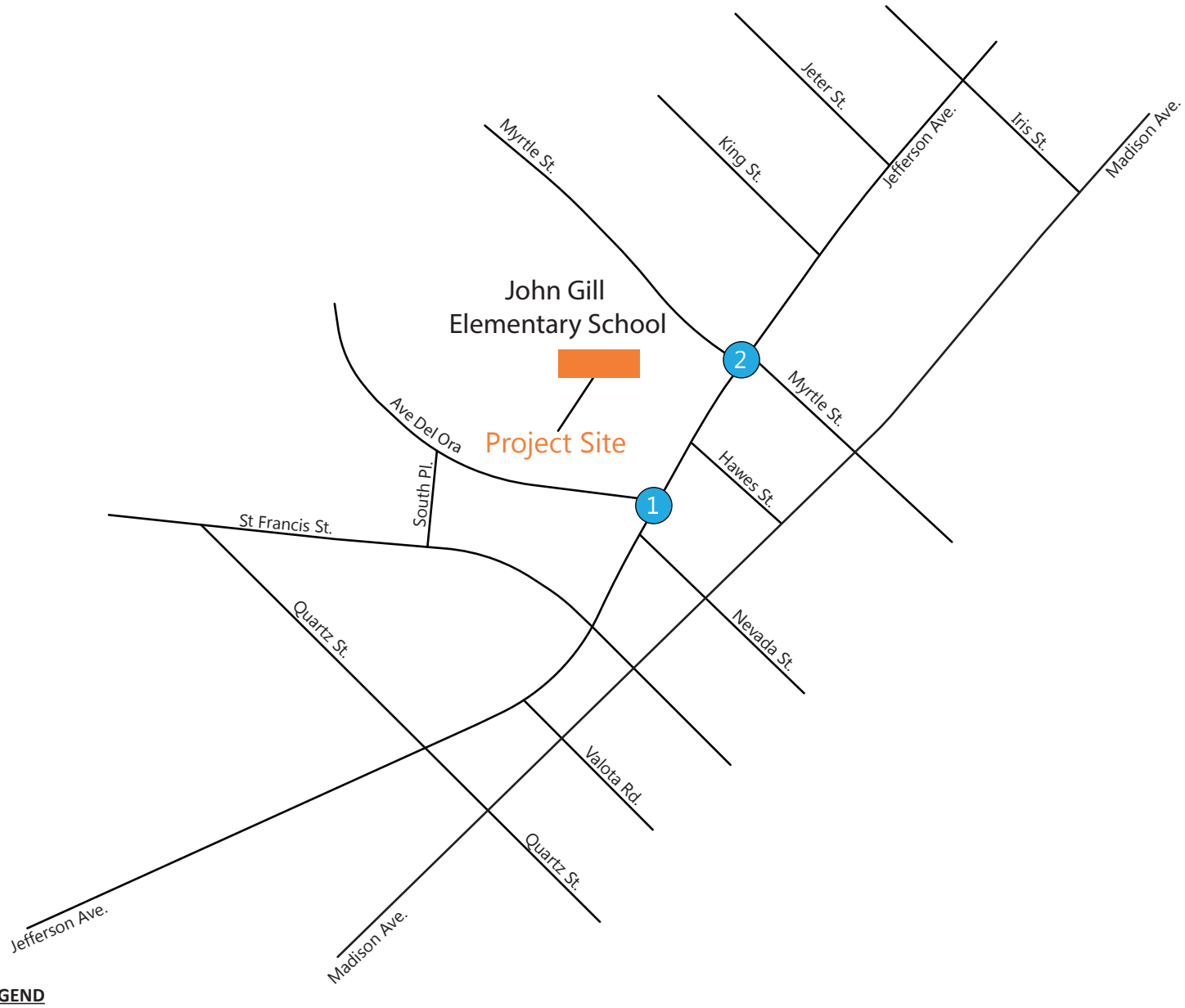
TJKM

081 - 041 (T2)

Figure 6

Existing Conditions Peak Hour Traffic Volumes





LEGEND

X Study Intersections
XX AM Peak Hour Volumes
(XX) Midday Peak Hour Volumes
[XX] PM Peak Hour Volumes

N

TJKM

EXISTING PLUS PROJECT CONDITIONS

The impacts of the proposed project on the transportation system are discussed in this chapter. First, the method used to estimate the amount of traffic generated by the project is described. Then, the results of the level of service calculations for Existing plus Project Conditions are presented. (Existing plus Project Conditions is defined as Existing Conditions plus traffic generated by the proposed project). A comparison of intersections under Existing plus Project Conditions and Existing Conditions is presented and the impacts of the project on the study intersections are discussed.

The amount of traffic added to the roadway system by the proposed development is estimated using a three-step process.

- Trip Generation – Estimates the amount of traffic added to the roadway network,
- Trip Distribution – Estimates the direction of travel to and from the project site,
- Trip Assignment – The new trips are assigned to specific street segments and intersection turning movements.

PROJECT TRIP GENERATION

TJKM developed estimated project trip generation for the proposed project based on published trip generation rates from the ITE publication *Trip Generation Manual (9th Edition)*. TJKM used published trip rates for the ITE Land Use Elementary School (ITE Code 520). **Table 5** shows the trip generation expected to be generated by the proposed project. TJKM applied 20 percent trip discounts to the proposed project for buses, pedestrian and bicycle uses. The project is expected to generate approximately 515 daily trips, 158 weekday a.m. peak hour trips (87 inbound trips, 71 outbound trips) and 53 weekday p.m. peak hour trips (26 inbound trips, 27 outbound trips). It should be noted that the a.m. peak hour trips has been used for midday peak also due to the similar travel patterns.

Table 5: Project Trip Generation

Land Use	*Size*	Daily		AM Peak					PM Peak				
		Rate	*Trips*	*Rate*	*In:Out (%)*	*In*	*Out*	*Total*	*Rate*	*In:Out (%)*	*In*	*Out*	*Total*
Elementary School (ITE Code 520)	440 Students	1.29	568	0.45	55:45	109	89	198	0.15	49:51	32	34	66
20 Percent-Bus/Ped/Bike reduction			53			22	18	40			6	7	13
Total Trips			**515**			**87**	**71**	**158**			**26**	**27**	**53**

Notes: Source - Institute of Transportation Engineers (ITE) *Trip Generation Manual, 9th Edition*, 2012

PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

Trip distribution is a process that determines in what proportion vehicles would be expected to travel between the project site and various destinations outside the project study area. Trip assignment also determines the various routes that vehicles would take from the project site to each destination using the calculated trip distribution. Trip distribution assumptions for the proposed project were developed based on existing travel patterns and knowledge of the study area.

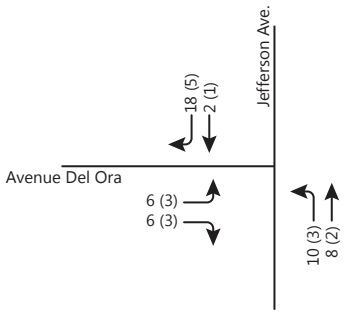
The distribution assumptions are as follows:

- 29 percent to/from south of Jefferson Avenue
- 25 percent to/from north of Jefferson Avenue
- 25 percent to/from Myrtle Street
- 10 percent to/from Iris Street
- 6 percent to/from St. Francis Street
- 5 percent to/from Jeter Street

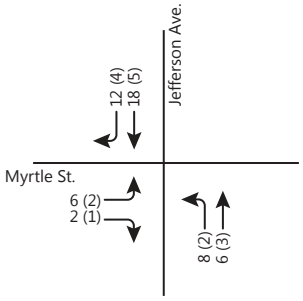
Project trips were assigned to the roadway network based on the trip distribution patterns discussed above. **Figure 8** illustrates the a.m., midday and p.m. peak hour project trips assigned to each turning movement at the study intersections and trip distribution. The assigned project trips were then added to traffic volumes under Existing Conditions to generate Existing plus project Conditions traffic volumes.

Project Trip Assignment and Distribution

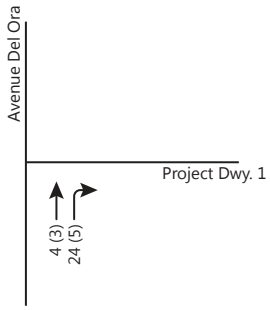
Intersection #1
Jefferson Ave. / Avenue Del Ora



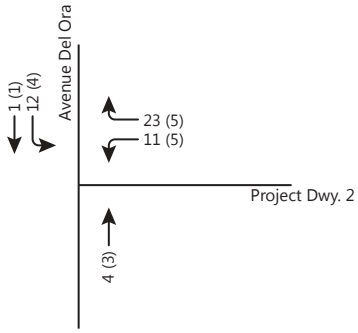
Intersection #2
Jefferson Ave. / Myrtle St.



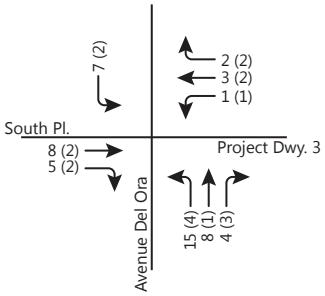
Intersection #3
Avenue Del Ora / Project Dwy. 1



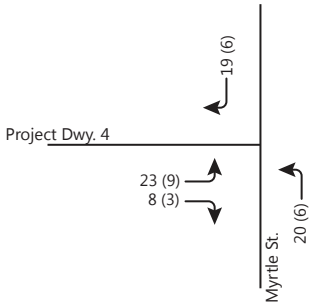
Intersection #4
Avenue Del Ora / Project Dwy. 2

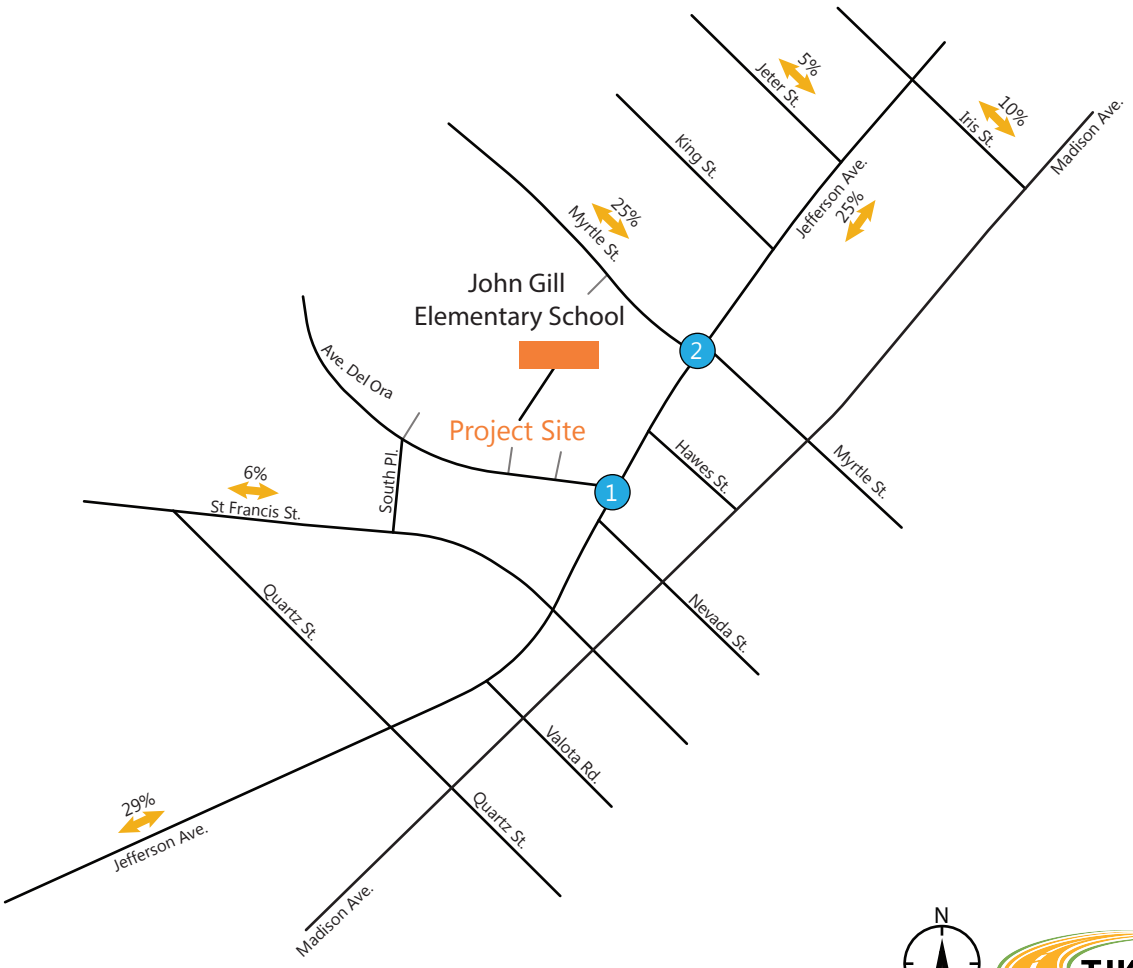


Intersection #5
Avenue Del Ora / Project Dwy. 3



Intersection #6
Mrytle St. / Project Dwy. 4





LEGEND

X — Study Intersections
XX — AM Peak Hour Trips
(XX) — PM Peak Hour Trips
X % — Trip Distribution

N

TJKM

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Figure 8

INTERSECTION LEVEL OF SERVICE ANALYSIS – EXISTING PLUS PROJECT CONDITIONS

Intersection levels of service were calculated with the new traffic added by the proposed project to existing volumes to evaluate the operating conditions of the intersections and identify potential impacts to the roadway system. The results of the intersection level of service calculations for Existing plus Project Conditions are presented in **Table 6**. **Appendix D** contains the corresponding calculation sheets. The results for Existing Conditions are included for comparison purpose, along with the projected increases in delay. The changes in delay between Existing and Existing plus Project Conditions are used to identify significant impacts. **Figure 9** shows projected turning movement volumes at the study intersections for Existing plus Project Conditions.

Under this scenario, the study intersections Avenue Del Ora/Jefferson Avenue and Myrtle Street/Jefferson Avenue, which operates at LOS F during the a.m., and p.m. peak hours. During the midday peak hour, all the intersections operate within City of Redwood City standards Level of Service (LOS) D or better.

Based on the City of Redwood City impact criteria the project is expected to have a less-than-significant impact at all the study intersections.

Table 6: Intersection Level of Service Analysis – Existing plus Project Conditions

#	Study Intersection	Control	Peak Hour[1]	Existing Conditions		Existing with Project Conditions		Change in Delay[4] (sec)
				Average Delay[2]	LOS[3]	Average Delay[2]	LOS[3]	
1	Avenue Del Ora/Jefferson Avenue	One-Way Stop	AM	**176.7**	**F**	**295.2**	**F**	118.50
			Midday	34.4	D	45.8	E	11.40
			PM	**59.2**	**F**	**66.6**	**F**	7.40
2	Myrtle Street/Jefferson Avenue	Two-Way Stop	AM	**68.1**	**F**	**181.1**	**F**	113.00
			Midday	31.6	D	43.5	E	11.90
			PM	**83.4**	**F**	**93.6**	**F**	10.20

Notes:
[1]AM – morning peak hour (between 7 and 9 a.m.), Midday-midday peak hour (between 1 and 3 p.m.), and PM-evening peak hour (between 4 and 6 p.m.)
[2]Total control delay for the worst movement is presented for side-street stop-controlled intersections.
[3]LOS – Level of Service calculations conducted using the Synchro 9.0 level of service analysis software package, which applies the methodology described in the 2000 HCM.
[4]Change in delay between Existing and Existing plus Project Conditions
Bold text indicates intersection operates at a deficient Level of Service.

SIGNAL WARRANT ANALYSIS

Based on the preceding Existing plus Project Conditions analysis, it is expected that proposed project would cause significant impacts with respect to traffic at the intersection of Avenue Del Ora/Jefferson Avenue. An assessment was made based on the Peak-Hour Signal Warrant (Section 4c.04) described in the California Manual on Uniform Traffic Control Devices (MUTCD). This method makes no evaluation of intersection level of service, but simply provides an indication whether peak hour traffic volumes are, or would be, sufficient to justify installation of a traffic signal. Additional analysis may include unsignalized level of service analysis and/or operational analysis such as evaluating vehicle queueing and delay. Other types of traffic control devices, signage or geometric changes may be preferable based on existing field conditions.

The proposed project adds traffic at the intersection of Avenue Del Ora and Jefferson Avenue (Intersection #1), projected to operate at LOS F during the a.m. peak hour and p.m. peak hour under Existing Conditions both with and without the project traffic. It should be noted that during the both a.m. and p.m. peak hours, the worst movement for this side-street stop controlled intersection is the eastbound approach (LOS F) with 295.5 seconds of delay in the a.m. peak hour and 66.6 seconds of delay in p.m. peak hour. The peak-hour signal warrant from the Manual of Uniform Traffic Control Devices (CA MUTCD) was evaluated for the unsignalized intersection Avenue Del Ora and Jefferson Avenue; this intersection does not meet CA MUTCD peak hour signal warrants during the a.m. and p.m. peak hours for Existing and Existing plus Project Conditions. Based on the analysis, a traffic signal does meet the criteria at this intersection. The detail for the traffic signal warrant is provided in **Appendix D**.

The proposed project adds traffic at the intersection of Myrtle Street and Jefferson Avenue (Intersection #2), projected to operate at LOS F during the a.m. peak hour and p.m. peak hour under Existing Conditions both with and without the project traffic. It should be noted that during the both a.m. and p.m. peak hours, the worst movement for this side-street stop controlled intersection is the eastbound approach (LOS F) with 181.1 seconds of delay in the a.m. peak hour and 93.6 seconds of delay in p.m. peak hour. The peak-hour signal warrant from the Manual of Uniform Traffic Control Devices (CA MUTCD) was evaluated for the unsignalized intersection Myrtle Street and Jefferson Avenue; this intersection does not meet CA MUTCD peak hour signal warrants during the a.m. and p.m. peak hours for Existing and Existing plus Project Conditions. Based on the analysis, a traffic signal does meet the criteria at this intersection. The details for the traffic signal warrants are provided in **Appendix D**.

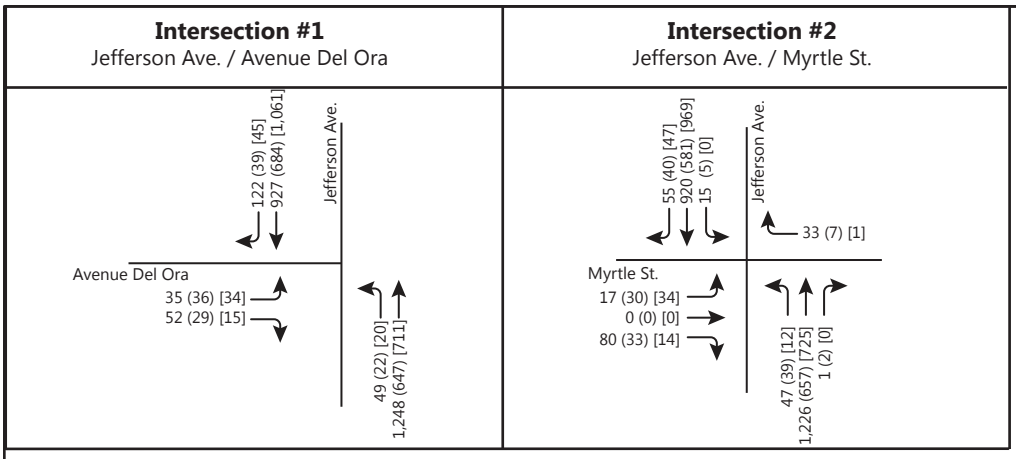
Based on the Redwood City impact criteria the project is expected to have a less-than-significant impact at all the study intersections.

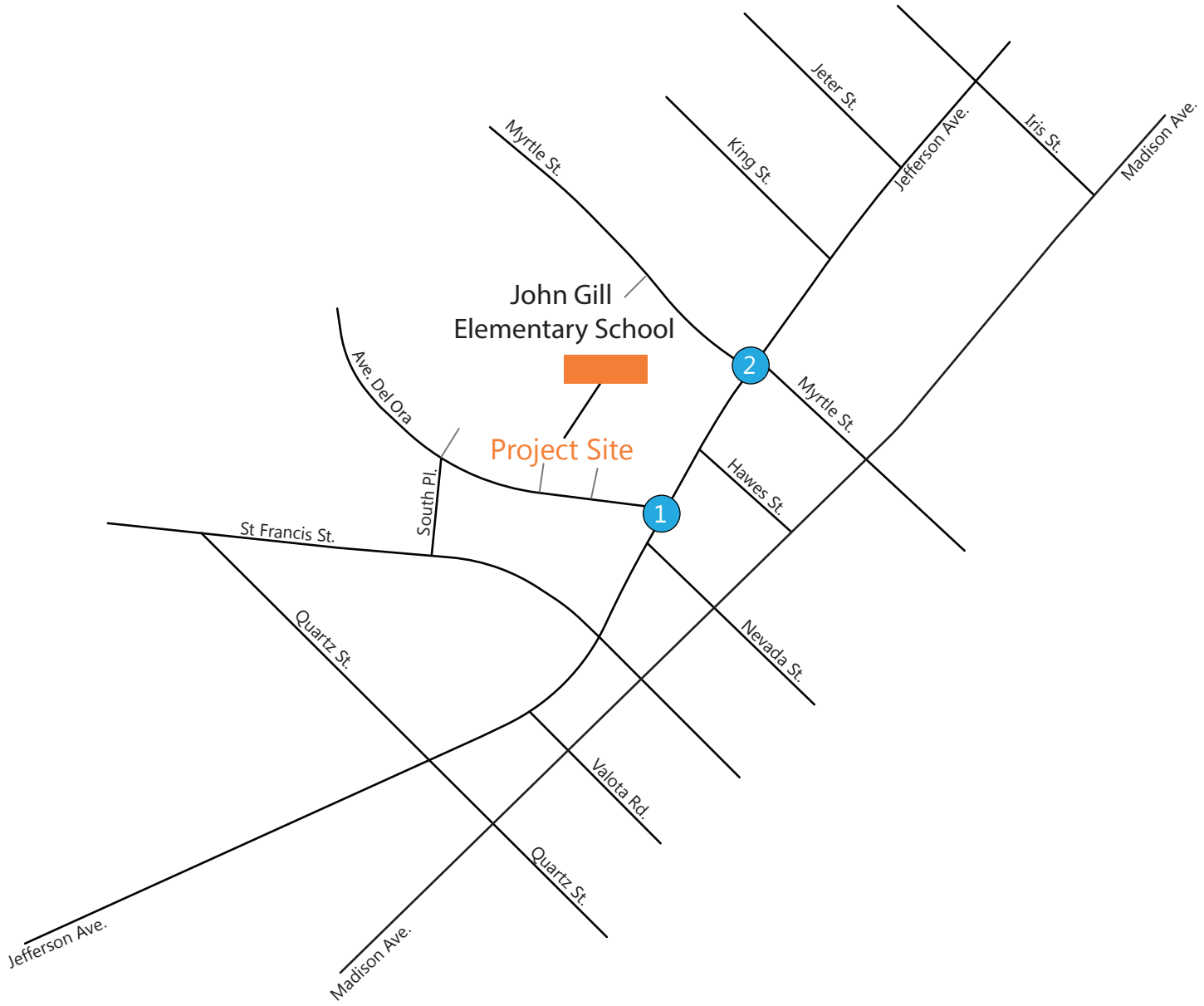
Mitigation

A mitigation of installing traffic signal would improve intersection operations to LOS A at Avenue Del Ora and Jefferson Avenue (Intersection #1), Myrtle Street and Jefferson Avenue (Intersection #2) during the a.m., and p.m. peak hour, thereby resulting in a less than significant impact due to the reduction in average delay from LOS F condition. However, signalizing these intersections would not be feasible as it is in close

proximity to the Jefferson Avenue and Hawes Street intersection, located between the two study intersections.

Existing plus Project Conditions Peak Hour Traffic Volumes





LEGEND

X Study Intersections
XX AM Peak Hour Volumes
(XX) Midday Peak Hour Volumes
[XX] PM Peak Hour Volumes

N

TJKM

QUEUING AND LEVEL OF SERVICE ANALYSIS AT PROJECT DRIVEWAY

TJKM conducted a vehicle queuing and LOS analysis at the proposed project driveways on Avenue Del Ora and Myrtle Street. The 95th percentile (maximum) queues were analyzed using the HCM 2000 Queue methodology contained in Synchro 9.0 software for the project driveways. As shown in **Table 7**, under Existing plus Project Conditions, the project driveways are expected to operate at an acceptable level of service. In addition, the 95th percentile queueing at the outbound approach of the project driveways are expected to be minimal.

Table 7: 95th Percentile Queues and Level of Service at Project Driveways

#	Intersection	Existing Plus Project Conditions								
		AM			MID			PM		
		Delay[1]	LOS[2]	95th percentile Queue[3] (feet)	Delay[1]	LOS[2]	95th percentile Queue[3] (feet)	Delay[1]	LOS[2]	95th percentile Queue[3] (feet)
1	Avenue Del Ora/Project Driveway 2	9.6	A	20	8.9	A	20	8.9	A	20
2	Avenue Del Ora/Driveway 3	10.3	B	20	9.5	A	20	9.2	A	20
3	Myrtle Street/Driveway 4	9.8	A	20	9.5	A	20	9.1	A	20

Notes:
[1] Delay = Average control delay in seconds per vehicle
[2] LOS = Level of Service
[3] Reported values of 95th percentile Queues are for the outbound movements at the project driveways

SITE ACCESS AND ON-SITE CIRCULATION AND OTHER IMPACTS

This section analyzes site access and internal circulation based on the site plan presented in **Figure 2**. TJKM reviewed internal and external access for the project site for passenger vehicles, buses, pedestrians, and bicycles.

On-Site Circulation

TJKM reviewed the proposed project site plan to evaluate on-site access to the project. **Figure 2** shows the proposed site plan for the project indicating the location of the project driveways and the internal circulation system. The access to the project site will be via four driveways, three on Avenue Del Ora, and the other one on Myrtle Street. The spacing between the entry & exit driveways are approximately 190 feet. The entry only driveway on Avenue Del Ora is approximately 60 feet from the intersection of Avenue Del Ora and Jefferson Avenue. All the driveways have a minimum width of 26 feet. Based on a preliminary review of the project conceptual plans (**Figure 2**), all project driveways are well spaced, properly aligned with opposing driveways, and provide adequate distance away from public intersections. The dispersion of project traffic to four access points will avoid creating heavy turning movements into the project site. The project driveways are expected to operate at an acceptable LOS. In addition, the 95th percentile queueing at the outbound approach of project driveways is expected to be minimal. Based on the evaluation, the driveways are expected to be adequate for passenger vehicles accessing the site. **Figure 8** shows the project trips at the driveways. Based on this evaluation, the access driveways are expected to be adequate for passenger vehicles and emergency vehicles accessing the site. TJKM recommends the installation of Stop control at the project driveways with appropriate pavement delineation and signing to enhance traffic safety and operations at the driveway.

TJKM also examined the project site plan (**Figure 2**) in order to evaluate the adequacy of on-site vehicles, vans and emergency vehicles circulation. The internal circulation was reviewed for issues related to queueing, turning radii, and safety and circulation aisles. Emergency vehicles can access the project via driveway on Avenue Del Ora, and the driveway on the Myrtle Street. Overall, the proposed on-site vehicle circulation is excellent and should not result in any significant impacts either on-site or on City streets.

RWSRTS report highlights poor driver behavior along Avenue Del Ora at the drop off/pick up zone. The installation of signage to prohibit U-turns on Avenue Del Ora as well as a parent or student valet program at the drop off/pick up areas can facilitate the ease of movement into and out of the parking lots during the peak congested times at the beginning and end of school. The appropriate use of red curb, loading zone, roadway markings and related signage can prevent internal weaving in and out of the parking lot.

Pedestrian Access

Pedestrian access to the project site will be facilitated by existing sidewalks on Jefferson Avenue, Avenue Del Ora and Myrtle Street. The study intersections crossing Avenue Del Ora and Myrtle Street, but not Jefferson Avenue. In between the two study intersections, there is a crossing at the signalized intersection of Hawes Street and Jefferson Avenue, crossing Jefferson. All the existing sidewalks are approximately 5 feet wide varying along the project area, which is considered narrow and less pedestrian-friendly. The

RWSRTS report recommends a road diet in order to widen the sidewalk and improve the walkability of the area. A road diet was completed on Jefferson Avenue west of the project site and had minor changes in vehicle travel time. A road diet would require additional analysis. Sidewalk widening would also require a review of utilities so not to affect existing infrastructure. There is adequate street lighting in the vicinity.

A significant impact occurs if the proposed project conflicts with applicable or adopted policies, plans or programs related to pedestrians facilities or otherwise decrease the performance or safety of pedestrian facilities. The proposed project will not result in any significant impacts to existing or planned pedestrian facilities in the immediate vicinity of the project because of the absence of such conflicts. However, the project is expected to generate demand for sidewalks to allow pedestrians to access nearby bus stops, and adjacent land uses. To accommodate all users of the street system and provide a complete and connected pedestrian facility between the project site and transit service.
Additional pedestrian improvements, in and around the school area, such as the installation of high visibility crosswalks, and other infrastructure recommendations from the RCSRTS Report are included in **Appendix E**.

Bicycle Access

In terms of bicycle access to the project site, there is an existing Class III bike route along Jefferson Avenue and Myrtle Street. The San Mateo County Comprehensive Bicycle and Pedestrian Plan proposes future designation of Jefferson Avenue has Class II facilities within the study area. There are adequate signage/markings for the bicyclists to maneuver without confusion. Overall, existing bicycle facilities provide adequate connectivity between the proposed project site and the adjacent neighborhoods. An impact to bicyclists occurs if the proposed project disrupt existing bicycle facilities; or conflict or create inconsistencies with adopted bicycle system plans, guidelines, and policies. A significant impact occurs if the proposed project conflicts with applicable or adopted policies, plans or programs related to bicycle facilities or otherwise decrease the performance or safety of bicycle facilities. The proposed project does not conflict with existing and planned bicycle facilities, therefore, the impact to bicycle facilities is *less-than-significant*.

Transit

The proposed project will generate very few trips via transit services, which can be accommodated by the existing transit capacity and hence the project is anticipated to have a *less-than-significant* impact on transit facilities.

Sight Distance Analysis

Sight distance is evaluated to determine if a driver will have adequate visibility to enter a roadway safely without resulting in a conflict with traffic already on the roadway. The project access points should be free and clear of any obstructions that would materially and adversely affect sight distance, thereby ensuring that exiting vehicles can see pedestrians on the sidewalk and other vehicles traveling on adjacent roadways. Landscaping and parking should not conflict with a driver's ability to locate a gap in traffic and see oncoming pedestrians and bicyclists. Adequate corner sight distance (sight distance triangles) should be provided at all site access points in accordance with the City's standards. Sight distance triangles

should be measured approximately 15 feet back from the traveled way. Sight distance requirements vary depending on the roadway speeds. The speed limit on Jefferson Avenue is 30 mph. According to the Highway Design Manual (HDM), Chapter 200, 2014, the required minimum stopping sight distance for design speed of 30 mph is 200 feet. The line of sight for vehicles exiting the driveways and vehicles travelling northbound and southbound on Jefferson Avenue are clear and visible. The project does not substantially increase hazards due to any design features.

PARKING

Based on the project site plan dated December 18, 2017 (**Figure 2**), a total of 45 parking spaces are provided for the proposed project, which includes auto parking and ADA parking. The City of Redwood City Municipal Code requires schools enrolling students in the tenth (10th) grade or below shall provide one space for each classroom and administrative office, plus one space for every 100 square feet in the auditorium. Based on the City's requirements, 22 parking spaces are required for John Gill School. The project proposes to provide 45 parking spaces, which includes 5 accessible stalls (4 accessible van stalls, and 1 standard accessible stalls). The ample supply of on-site parking will ensure that there are no parking impacts. The project also proposes a designated drop-off zones on Avenue Del Ora. There should be minimal impact on the adjoining neighborhood either from a circulation or parking standpoint.

CONCLUSION

- The proposed project is expected to generate 515 daily vehicular trips in which 158 weekday a.m. peak hour trips (87 inbound trips, 71 outbound trips) and 53 weekday p.m. peak hour trips (26 inbound trips, 27 outbound trips).
- Under Existing Conditions, stop controlled intersections i.e Avenue Del Ora/Jefferson Avenue and Myrtle Street/Jefferson Avenue, which operates at LOS F during the a.m., and p.m. peak hours. These intersections operates at LOS D/E during the midday peak hour, which is within the applicable jurisdictional standards of City of Redwood City (LOS D).
- Under Existing plus Project Conditions, stop controlled intersections i.e Avenue Del Ora/Jefferson Avenue and Myrtle Street/Jefferson Avenue, which continues to operate at LOS F during the a.m., and p.m. peak hours. These intersections operates at LOS D/E during the midday peak hour, which is within the applicable jurisdictional standards of City of Redwood City (LOS D). Based on the peak-hour signal warrant from the *Manual of Uniform Traffic Control Devices* (CA MUTCD), a traffic signal is not warranted for those intersections.
- The proposed project does not create a significant impact on the expected left-turn or right-turn queues at the study intersection. The project driveways are expected to operate at an acceptable LOS and the 95th percentile queueing at the outbound approach of project driveways is expected to be minimal.
- The proposed project does not conflict with existing and planned pedestrian or bicycle facilities. There are five bus stops in the immediate vicinity of the project site; all the bus stops are located on Jefferson Avenue. The transit service within the immediate vicinity of the project site operates well below capacity, and additional trips generated by the proposed project could be accommodated by existing bus services. Therefore the impacts to pedestrian, bicycle and transit facilities are *less-than-significant*.
- The proposed project's access will be via access driveways on Jefferson Avenue and Myrtle Street. Based on the evaluation, the proposed on-site vehicle circulation is adequate and should not result in any significant traffic operations issues.
- As per the Redwood City requirements, the total parking required by the project is 22 parking stalls. The project provides a total of 45 parking stalls. Therefore, no parking impacts are projected on City streets.

Appendix A –Level of Service Methodology

APPENDIX A
LEVEL OF SERVICE

The description and procedures for calculating capacity and level of service (LOS) are found in Transportation Research Board, *Highway Capacity Manual 2000*. *Highway Capacity Manual 2000* represents the latest research on capacity and quality of service for transportation facilities.

Quality of service requires quantitative measures to characterize operational conditions within a traffic stream. LOS is a quality measure describing operational conditions within a traffic stream, generally in terms of such service measures as speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience.

Six levels of service are defined for each type of facility that has analysis procedures available. Letters designate each level, from A to F, with LOS A representing the best operating conditions and LOS F the worst. Each LOS represents a range of operating conditions and the driver's perception of these conditions. Safety is not included in the measures that establish service levels.

A general description of service levels for various types of facilities is shown in Table A-I

Table A-I: Level of Service Description

Facility Type	***Uninterrupted Flow***	***Interrupted Flow***
	Freeways Multi-lane Highways Two-lane Highways Urban Streets	Signalized Intersections Unsignalized Intersections Two-way Stop Control All-way Stop Control
LOS		
A	Free-flow	Very low delay.
B	Stable flow. Presence of other users noticeable.	Low delay.
C	Stable flow. Comfort and convenience starts to decline.	Acceptable delay.
D	High-density stable flow.	Tolerable delay.
E	Unstable flow.	Limit of acceptable delay.
F	Forced or breakdown flow.	Unacceptable delay

Source: *Highway Capacity Manual 2000*

Urban Streets

The term "urban streets" refers to urban arterials and collectors, including those in downtown areas.

Arterial streets are roads that primarily serve longer through trips. However, providing access to abutting commercial and residential land uses is also an important function of arterials.
Collector streets provide both land access and traffic circulation within residential, commercial and industrial areas. Their access function is more important than that of arterials, and unlike arterials their operation is not always dominated by traffic signals.

Downtown streets are signalized facilities that often resemble arterials. They not only move through traffic but also provide access to local businesses for passenger cars, transit buses, and trucks.

Pedestrian conflicts and lane obstructions created by stopping or standing buses, trucks and parking vehicles that cause turbulence in the traffic flow are typical of downtown streets.

The speed of vehicles on urban streets is influenced by three main factors, street environment, interaction among vehicles and traffic control. As a result, these factors also affect quality of service.

The street environment includes the geometric characteristics of the facility, the character of roadside activity and adjacent land uses. Thus, the environment reflects the number and width of lanes, type of median, driveway density, spacing between signalized intersections, existence of parking, level of pedestrian activity and speed limit.

The interaction among vehicles is determined by traffic density, the proportion of trucks and buses, and turning movements. This interaction affects the operation of vehicles at intersections and, to a lesser extent, between signals.

Traffic control (including signals and signs) forces a portion of all vehicles to slow or stop. The delays and speed changes caused by traffic control devices reduce vehicle speeds, however, such controls are needed to establish right-of-way.

The average travel speed for through vehicles along an urban street is the determinant of the operating LOS. The travel speed along a segment, section or entire length of an urban street is dependent on the running speed between signalized intersections and the amount of control delay incurred at signalized intersections.

LOS A describes primarily free-flow operations. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Control delay at signalized intersections is minimal.

LOS B describes reasonably unimpeded operations. The ability to maneuver within the traffic stream is only slightly restricted, and control delays at signalized intersections are not significant.

LOS C describes stable operations, however, ability to maneuver and change lanes in midblock location may be more restricted than at LOS B. Longer queues, adverse signal coordination, or both may contribute to lower travel speeds.

LOS D borders on a range in which in which small increases in flow may cause substantial increases in delay and decreases in travel speed. LOS D may be due to adverse signal progression, inappropriate signal timing, high volumes, or a combination of these factors.

LOS E is characterized by significant delays and lower travel speeds. Such operations are caused by a combination of adverse progression, high signal density, high volumes, extensive delays at critical intersections, and inappropriate signal timing.

LOS F is characterized by urban street flow at extremely low speeds. Intersection congestion is likely at critical signalized locations, with high delays, high volumes, and extensive queuing.

The methodology to determine LOS stratifies urban streets into four classifications. The classifications are complex, and are related to functional and design categories. Table A-II describes the functional and design categories, while Table A-III relates these to the urban street classification.

Once classified, the urban street is divided into segments for analysis. An urban street segment is a one-way section of street encompassing a series of blocks or links terminating at a signalized intersection. Adjacent segments of urban streets may be combined to form larger street sections, provided that the segments have similar demand flows and characteristics.

Levels of service are related to the average travel speed of vehicles along the urban street segment or section.

Travel times for existing conditions are obtained by field measurements. The maximum-car technique is used. The vehicle is driven at the posted speed limit unless impeded by actual traffic conditions. In the maximum-car technique, a safe level of vehicular operation is maintained by observing proper following distances and by changing speeds at reasonable rates of acceleration and deceleration. The maximum-car technique provides the best base for measuring traffic performance.

An observer records the travel time and locations and duration of delay. The beginning and ending points are the centers of intersections. Delays include times waiting in queues at signalized intersections. The travel speed is determined by dividing the length of the segment by the travel time. Once the travel speed on the arterial is determined, the LOS is found by comparing the speed to the criteria in Table A-IV. LOS criteria vary for the different classifications of urban street, reflecting differences in driver expectations.

Table A-II: Functional and Design Categories for Urban Streets

Criterion	***Functional Category***			
	Principal Arterial		***Minor Arterial***	
Mobility function	Very important		Important	
Access function	Very minor		Substantial	
Points connected	Freeways, important activity centers, major traffic generators		Principal arterials	
Predominant trips served	Relatively long trips between major points and through trips entering, leaving, and passing through city		Trips of moderate length within relatively small geographical areas	
Criterion	***Design Category***			
	High-Speed	***Suburban***	***Intermediate***	***Urban***
Driveway access density	Very low density	Low density	Moderate density	High density
Arterial type	Multilane divided; undivided or two-lane with shoulders	Multilane divided: undivided or two-lane with shoulders	Multilane divided or undivided; one way, two lane	Undivided one way; two way, two or more lanes
Parking	No	No	Some	Usually
Separate left-turn lanes	Yes	Yes	Usually	Some
Signals per mile	0.5 to 2	1 to 5	4 to 10	6 to 12
Speed limits	45 to 55 mph	40 to 45 mph	30 to 40 mph	25 to 35 mph
Pedestrian activity	Very little	Little	Some	Usually
Roadside development	Low density	Low to medium density	Medium to moderate density	High density

Source: *Highway Capacity Manual 2000*

Table A-III: Urban Street Class based on Function and Design Categories

Design Category	*Functional Category*	
	Principal Arterial	***Minor Arterial***
High-Speed	I	Not applicable
Suburban	II	II
Intermediate	II	III or IV
Urban	III or IV	IV

Source: *Highway Capacity Manual 2000*

Table A-IV: Urban Street Levels of Service by Class

Urban Street Class	***I***	***II***	***III***	***IV***
Range of Free Flow Speeds (mph)	45 to 55	35 to 45	30 to 35	25 to 35
Typical Free Flow Speed (mph)	50	40	33	30
LOS	***Average Travel Speed (mph)***			
A	>42	>35	>30	>25
B	>34	>28	>24	>19
C	>27	>22	>18	>13
D	>21	>17	>14	>9
E	>16	>13	>10	>7
F	≤16	≤13	≤10	≤7

Source: *Highway Capacity Manual 2000*

Interrupted Flow

One of the more important elements limiting, and often interrupting the flow of traffic on a highway is the intersection. Flow on an interrupted facility is usually dominated by points of fixed operation such as traffic signals, stop and yield signs. These all operate quite differently and have differing impacts on overall flow.

Signalized Intersections

The capacity of a highway is related primarily to the geometric characteristics of the facility, as well as to the composition of the traffic stream on the facility. Geometrics are a fixed, or non-varying, characteristic of a facility.

At the signalized intersection, an additional element is introduced into the concept of capacity: time allocation. A traffic signal essentially allocates time among conflicting traffic movements seeking use of the same physical space. The way in which time is allocated has a significant impact on the operation of the intersection and on the capacity of the intersection and its approaches.

LOS for signalized intersections is defined in terms of control delay, which is a measure of driver discomfort, frustration, fuel consumption, and increased travel time. The delay experienced by a motorist is made up of a number of factors that relate to control, traffic and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during base conditions, *i. e.,* in the absence of traffic control, geometric delay, any incidents, and any other vehicles. Specifically, LOS criteria for traffic signals are stated in terms of average control delay per vehicle, typically for a 15-minute analysis period. Delay is a complex measure and depends on a number of variables, including the quality of progression, the cycle length, the ratio of green time to cycle length and the volume to capacity ratio for the lane group.

For each intersection analyzed the average control delay per vehicle per approach is determined for the peak hour. A weighted average of control delay per vehicle is then determined for the intersection. A LOS designation is given to the control delay to better describe the level of operation. A description of levels of service for signalized intersections can be found in Table A-V

Table A-V: Description of Level of Service for Signalized Intersections

LOS	*Description*
A	Very low control delay, up to 10 seconds per vehicle. Progression is extremely favorable, and most vehicles arrive during the green phase. Many vehicles do not stop at all. Short cycle lengths may tend to contribute to low delay values.
B	Control delay greater than 10 and up to 20 seconds per vehicle. There is good progression or short cycle lengths or both. More vehicles stop causing higher levels of delay.
C	Control delay greater than 20 and up to 35 seconds per vehicle. Higher delays are caused by fair progression or longer cycle lengths or both. Individual cycle failures may begin to appear. Cycle failure occurs when a given green phase doe not serve queued vehicles, and overflow occurs. The number of vehicles stopping is significant, though many still pass through the intersection without stopping.
D	Control delay greater than 35 and up to 55 seconds per vehicle. The influence of congestions becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volumes. Many vehicles stop, the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	Control delay greater than 55 and up to 80 seconds per vehicle. The limit of acceptable delay. High delays usually indicate poor progression, long cycle lengths, and high volumes. Individual cycle failures are frequent.
F	Control delay in excess of 80 seconds per vehicle. Unacceptable to most drivers. Oversaturation, arrival flow rates exceed the capacity of the intersection. Many individual cycle failures. Poor progression and long cycle lengths may also be contributing factors to higher delay.

Source: *Highway Capacity Manual 2000*

The use of control delay, which may also be referred to as signal delay, was introduced in the 1997 update to the *Highway Capacity Manual*, and represents a departure from previous updates. In the third edition, published in 1985 and the 1994 update to the third edition, delay only included stopped delay. Thus, the LOS criteria listed in Table A-V differs from earlier criteria.

Unsignalized Intersections

The current procedures on unsignalized intersections were first introduced in the 1997 update to the *Highway Capacity Manual* and represent a revision of the methodology published in the 1994 update to the 1985 *Highway Capacity Manual*. The revised procedures use control delay as a measure of effectiveness to determine LOS. Delay is a measure of driver discomfort, frustration, fuel consumption, and increased travel time. The delay experienced by a motorist is made up of a number of factors that relate to control, traffic and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during base conditions, *i. e.,* in the absence of traffic control, geometric delay, any incidents, and any other vehicles. Control delay is the increased time of travel for a vehicle approaching and passing through an unsignalized intersection, compared with a free-flow vehicle if it were not required to slow or stop at the intersection.

Two-Way Stop Controlled Intersections

Two-way stop controlled intersections in which stop signs are used to assign the right-of-way, are the most prevalent type of intersection in the United States. At two-way stop-controlled intersections the stop-controlled approaches are referred as the minor street approaches and can be either public streets or private driveways. The approaches that are not controlled by stop signs are referred to as the major street approaches.

The capacity of movements subject to delay are determined using the "critical gap" method of capacity analysis. Expected average control delay based on movement volume and movement capacity is calculated. A LOS designation is given to the expected control delay for each minor movement. LOS is not defined for the intersection as a whole. Control delay is the increased time of travel for a vehicle approaching and passing through a stop-controlled intersection, compared with a free-flow vehicle if it were not required to slow or stop at the intersection. A description of levels of service for two-way stop-controlled intersections is found in Table A-VI.

Table A-VI: Description of Level of Service for Two-Way Stop Controlled Intersections

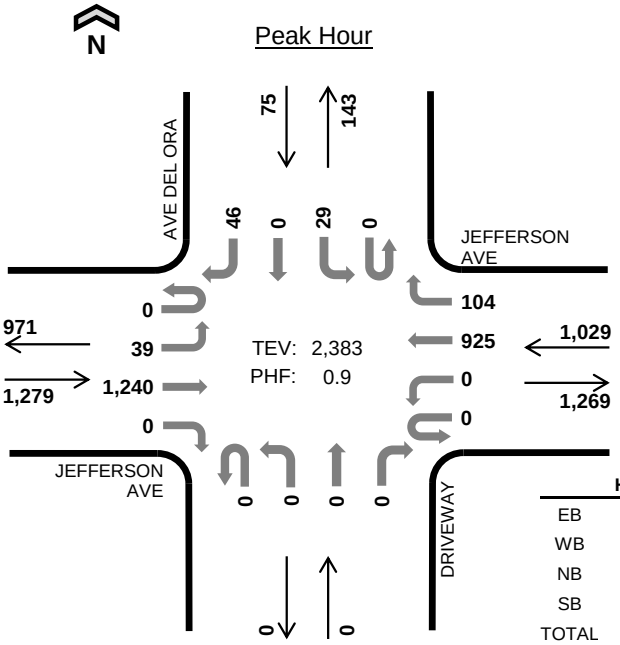
LOS	*Description*
A	Very low control delay less than 10 seconds per vehicle for each movement subject to delay.
B	Low control delay greater than 10 and up to 15 seconds per vehicle for each movement subject to delay.
C	Acceptable control delay greater than 15 and up to 25 seconds per vehicle for each movement subject to delay.
D	Tolerable control delay greater than 25 and up to 35 seconds per vehicle for each movement subject to delay.
E	Limit of tolerable control delay greater than 35 and up to 50 seconds per vehicle for each movement subject to delay.
F	Unacceptable control delay in excess of 50 seconds per vehicle for each movement subject to delay.

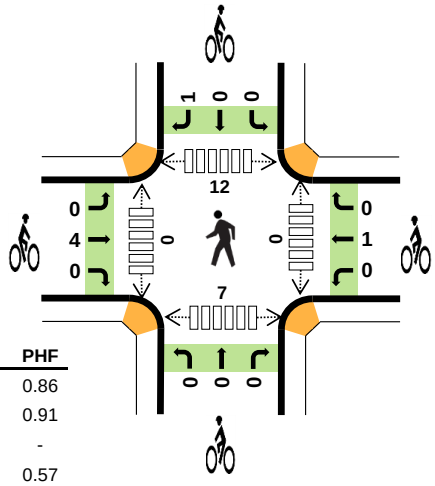
Source: *Highway Capacity Manual 2000*

Appendix B –Traffic Counts Sheets

AVE DEL ORA
JEFFERSON AVE

Date: 10/12/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM





	HV %:	PHF
EB	1.0%	0.86
WB	1.7%	0.91
NB	-	-
SB	0.0%	0.57
TOTAL	1.3%	0.90

Two-Hour Count Summaries

Interval Start		JEFFERSON AVE Eastbound				JEFFERSON AVE Westbound				DRIVEWAY Northbound				AVE DEL ORA Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	0	128	0	0	0	75	2	0	0	0	0	0	4	0	1	210	0
7:15 AM		0	1	168	0	0	0	124	8	0	0	0	0	0	6	0	5	312	0
7:30 AM		**0**	**4**	**233**	**0**	**0**	**0**	**196**	**16**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**7**	**460**	0
7:45 AM		**0**	**6**	**305**	**0**	**0**	**0**	**253**	**29**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**10**	**608**	1,590
8:00 AM		**0**	**24**	**347**	**0**	**0**	**0**	**228**	**41**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**9**	**656**	2,036
8:15 AM		**0**	**5**	**355**	**0**	**0**	**0**	**248**	**18**	**0**	**0**	**0**	**0**	**0**	**13**	**0**	**20**	**659**	**2,383**
8:30 AM		0	1	216	0	0	0	192	8	0	0	0	0	0	11	0	4	432	2,355
8:45 AM		0	0	222	0	0	0	157	2	0	0	0	0	0	3	0	3	387	2,134
Count Total		0	41	1,974	0	0	0	1,473	124	0	0	0	0	0	53	0	59	3,724	0
Peak Hour	**All**	**0**	**39**	**1,240**	**0**	**0**	**0**	**925**	**104**	**0**	**0**	**0**	**0**	**0**	**29**	**0**	**46**	**2,383**	**0**
	HV	**0**	**1**	**12**	**0**	**0**	**0**	**15**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**31**	**0**
	HV%	**-**	**3%**	**1%**	**-**	**-**	**-**	**2%**	**3%**	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	2	2	0	0	*4*	0	0	0	0	*0*	0	0	2	0	*2*
7:15 AM	1	5	0	1	*7*	2	1	0	0	*3*	0	0	2	0	*2*
7:30 AM	**3**	**5**	**0**	**0**	***8***	**2**	**0**	**0**	**0**	***2***	**0**	**0**	**3**	**1**	*4*
7:45 AM	**3**	**6**	**0**	**0**	***9***	**2**	**0**	**0**	**1**	***3***	**0**	**0**	**7**	**1**	*8*
8:00 AM	**3**	**5**	**0**	**0**	***8***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**1**	**2**	*3*
8:15 AM	**4**	**2**	**0**	**0**	***6***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**3**	***4***
8:30 AM	0	1	0	0	*1*	0	1	0	0	*1*	0	0	0	1	*1*
8:45 AM	2	3	0	0	*5*	2	0	0	0	*2*	0	0	1	1	*2*
Count Total	18	29	0	1	*48*	8	3	0	1	*12*	0	0	17	9	*26*
Peak Hour	**13**	**18**	**0**	**0**	***31***	**4**	**1**	**0**	**1**	***6***	**0**	**0**	**12**	**7**	***19***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	JEFFERSON AVE Eastbound				JEFFERSON AVE Westbound				DRIVEWAY Northbound				AVE DEL ORA Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4	0
7:15 AM	0	0	1	0	0	0	5	0	0	0	0	0	0	0	0	1	7	0
7:30 AM	**0**	**0**	**3**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	0
7:45 AM	**0**	**1**	**2**	**0**	**0**	**0**	**4**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	28
8:00 AM	**0**	**0**	**3**	**0**	**0**	**0**	**4**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	32
8:15 AM	**0**	**0**	**4**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**31**
8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	24
8:45 AM	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5	20
Count Total	0	1	17	0	0	0	25	4	0	0	0	0	0	0	0	1	48	0
Peak Hour	**0**	**1**	**12**	**0**	**0**	**0**	**15**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**31**	**0**

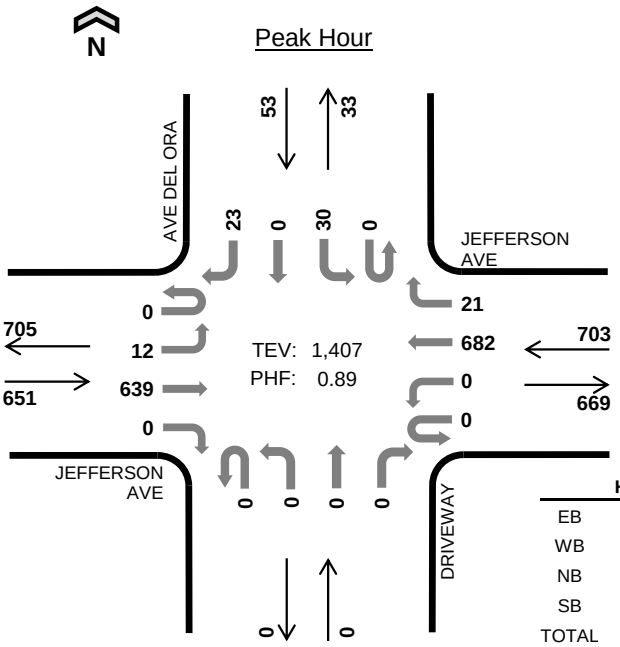
Two-Hour Count Summaries - Bikes

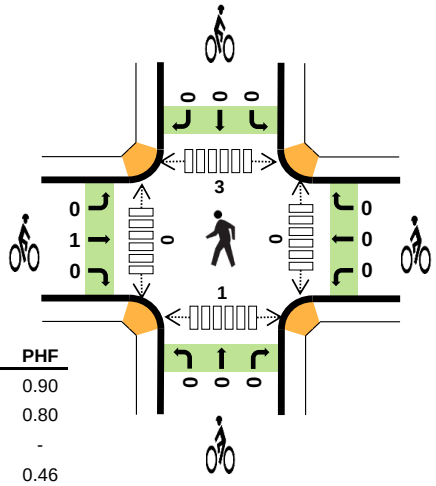
Interval Start	JEFFERSON AVE Eastbound			JEFFERSON AVE Westbound			DRIVEWAY Northbound			AVE DEL ORA Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	2	0	0	1	0	0	0	0	0	0	0	3	0
7:30 AM	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	0
7:45 AM	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**3**	8
8:00 AM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	9
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**
8:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	5
8:45 AM	0	2	0	0	0	0	0	0	0	0	0	0	2	4
Count Total	0	8	0	0	3	0	0	0	0	0	0	1	12	0
Peak Hour	**0**	**4**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**6**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

AVE DEL ORA
JEFFERSON AVE

Date: 10/12/2017
Count Period: 1:00 PM to 3:00 PM
Peak Hour: 1:15 PM to 2:15 PM





	HV %:	PHF
EB	1.4%	0.90
WB	1.6%	0.80
NB	-	-
SB	1.9%	0.46
TOTAL	1.5%	0.89

Two-Hour Count Summaries

Interval Start		JEFFERSON AVE Eastbound				JEFFERSON AVE Westbound				DRIVEWAY Northbound				AVE DEL ORA Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
1:00 PM		1	7	141	0	0	0	133	20	0	0	0	0	0	6	0	2	310	0
1:15 PM		**0**	**4**	**133**	**0**	**0**	**0**	**176**	**10**	**0**	**0**	**0**	**0**	**0**	**16**	**0**	**13**	**352**	0
1:30 PM		**0**	**4**	**176**	**0**	**0**	**0**	**130**	**1**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**2**	**320**	0
1:45 PM		**0**	**3**	**164**	**0**	**0**	**0**	**159**	**8**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**4**	**339**	1,321
2:00 PM		**0**	**1**	**166**	**0**	**0**	**0**	**217**	**2**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**4**	**396**	**1,407**
2:15 PM		0	2	149	0	0	0	119	2	0	0	0	0	0	2	0	1	275	1,330
2:30 PM		1	1	166	0	0	0	147	8	0	0	0	0	0	3	0	2	328	1,338
2:45 PM		0	2	160	0	0	0	160	8	0	0	0	0	0	4	0	5	339	1,338
Count Total		2	24	1,255	0	0	0	1,241	59	0	0	0	0	0	45	0	33	2,659	0
Peak Hour	**All**	**0**	**12**	**639**	**0**	**0**	**0**	**682**	**21**	**0**	**0**	**0**	**0**	**0**	**30**	**0**	**23**	**1,407**	**0**
	HV	**0**	**1**	**8**	**0**	**0**	**0**	**11**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**21**	**0**
	HV%	**-**	**8%**	**1%**	**-**	**-**	**-**	**2%**	**0%**	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**4%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
1:00 PM	4	4	0	0	*8*	0	1	0	0	*1*	0	0	0	0	*0*
1:15 PM	**3**	**5**	**0**	**1**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	*1*
1:30 PM	**1**	**2**	**0**	**0**	***3***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**1**	**0**	*1*
1:45 PM	**2**	**4**	**0**	**0**	***6***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	*1*
2:00 PM	**3**	**0**	**0**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	***1***
2:15 PM	5	2	0	1	*8*	1	1	0	0	*2*	0	0	2	2	*4*
2:30 PM	2	1	0	0	*3*	0	0	0	0	*0*	0	0	1	1	*2*
2:45 PM	3	3	0	0	*6*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	23	21	0	2	*46*	2	2	0	0	*4*	0	0	6	4	*10*
Peak Hour	**9**	**11**	**0**	**1**	***21***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**3**	**1**	***4***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	JEFFERSON AVE Eastbound				JEFFERSON AVE Westbound				DRIVEWAY Northbound				AVE DEL ORA Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
1:00 PM	0	1	3	0	0	0	4	0	0	0	0	0	0	0	0	0	8	0
1:15 PM	**0**	**0**	**3**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**9**	0
1:30 PM	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	0
1:45 PM	**0**	**0**	**2**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	26
2:00 PM	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**21**
2:15 PM	0	0	5	0	0	0	2	0	0	0	0	0	0	0	0	1	8	20
2:30 PM	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3	20
2:45 PM	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	6	20
Count Total	0	2	21	0	0	0	21	0	0	0	0	0	0	0	0	2	46	0
Peak Hour	**0**	**1**	**8**	**0**	**0**	**0**	**11**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**21**	**0**

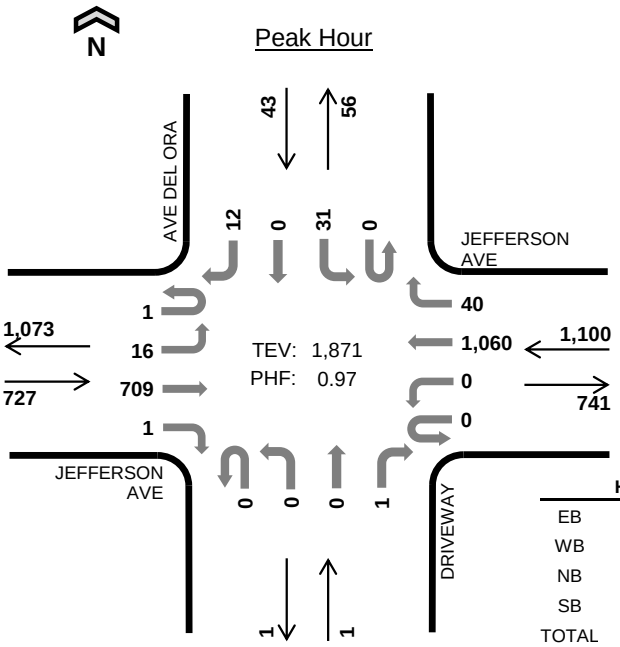
Two-Hour Count Summaries - Bikes

Interval Start	JEFFERSON AVE Eastbound			JEFFERSON AVE Westbound			DRIVEWAY Northbound			AVE DEL ORA Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
1:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
1:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
1:30 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
1:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
2:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
2:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	2	3
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Count Total	0	2	0	0	2	0	0	0	0	0	0	0	4	0
Peak Hour	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

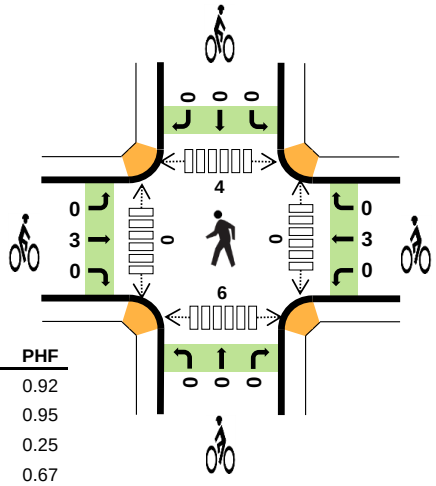
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

AVE DEL ORA
JEFFERSON AVE

Date: 10/12/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	0.4%	0.92
WB	0.5%	0.95
NB	0.0%	0.25
SB	0.0%	0.67
TOTAL	0.5%	0.97



Two-Hour Count Summaries

Interval Start	JEFFERSON AVE Eastbound				JEFFERSON AVE Westbound				DRIVEWAY Northbound				AVE DEL ORA Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	1	3	180	0	0	0	204	4	0	0	0	0	0	2	0	2	396	0
4:15 PM	1	3	185	0	0	0	176	5	0	0	0	0	0	5	0	4	379	0
4:30 PM	0	2	189	0	0	0	216	7	0	0	0	0	0	8	0	4	426	0
4:45 PM	0	1	183	0	0	0	235	13	0	0	0	0	0	6	0	3	441	1,642
5:00 PM	**0**	**6**	**171**	**0**	**0**	**0**	**278**	**11**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**3**	**477**	1,723
5:15 PM	**0**	**2**	**181**	**0**	**0**	**0**	**253**	**9**	**0**	**0**	**0**	**0**	**0**	**11**	**0**	**5**	**461**	1,805
5:30 PM	**0**	**2**	**194**	**1**	**0**	**0**	**266**	**10**	**0**	**0**	**0**	**1**	**0**	**7**	**0**	**2**	**483**	1,862
5:45 PM	**1**	**6**	**163**	**0**	**0**	**0**	**263**	**10**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**2**	**450**	**1,871**
Count Total	3	25	1,446	1	0	0	1,891	69	0	0	0	1	0	52	0	25	3,513	0
Peak Hour All	**1**	**16**	**709**	**1**	**0**	**0**	**1,060**	**40**	**0**	**0**	**0**	**1**	**0**	**31**	**0**	**12**	**1,871**	**0**
Peak Hour HV	**0**	**0**	**3**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**0**
Peak Hour HV%	**0%**	**0%**	**0%**	**0%**	**-**	**-**	**1%**	**0%**	**-**	**-**	**-**	**0%**	**-**	**0%**	**-**	**0%**	**0%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	2	3	0	0	*5*	0	1	0	0	*1*	0	0	3	0	*3*
4:15 PM	1	1	0	0	*2*	1	1	0	0	*2*	0	0	2	0	*2*
4:30 PM	2	3	0	0	*5*	0	0	0	0	*0*	0	0	2	1	*3*
4:45 PM	1	0	0	0	*1*	1	1	0	0	*2*	0	0	0	0	*0*
5:00 PM	**1**	**1**	**0**	**0**	***2***	**2**	**0**	**0**	**0**	***2***	**0**	**0**	**2**	**0**	*2*
5:15 PM	**1**	**3**	**0**	**0**	***4***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**2**	**1**	*3*
5:30 PM	**0**	**1**	**0**	**0**	***1***	**1**	**2**	**0**	**0**	***3***	**0**	**0**	**0**	**0**	*0*
5:45 PM	**1**	**1**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**5**	***5***
Count Total	9	13	0	0	*22*	5	6	0	0	*11*	0	0	11	7	*18*
Peak Hour	**3**	**6**	**0**	**0**	***9***	**3**	**3**	**0**	**0**	***6***	**0**	**0**	**4**	**6**	***10***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	JEFFERSON AVE Eastbound				JEFFERSON AVE Westbound				DRIVEWAY Northbound				AVE DEL ORA Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5	0
4:15 PM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0
4:30 PM	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5	0
4:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	13
5:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	10
5:15 PM	**0**	**0**	**1**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	12
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	8
5:45 PM	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**9**
Count Total	0	0	9	0	0	0	12	1	0	0	0	0	0	0	0	0	22	0
Peak Hour	**0**	**0**	**3**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**0**

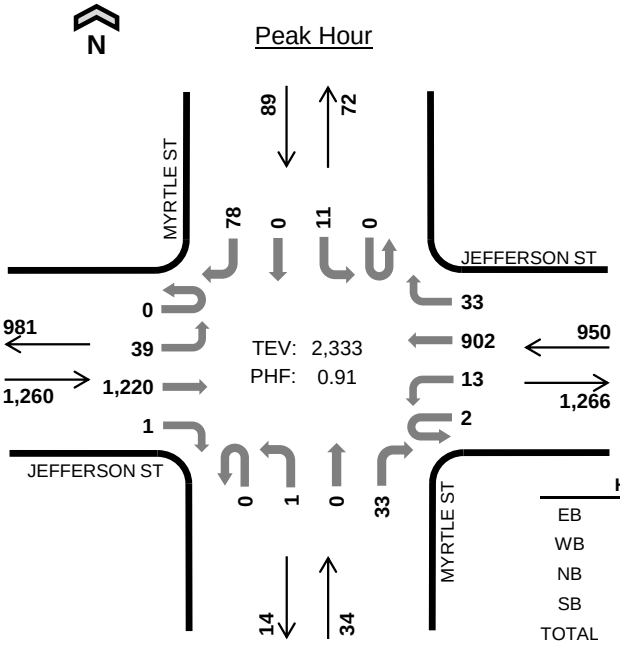
Two-Hour Count Summaries - Bikes

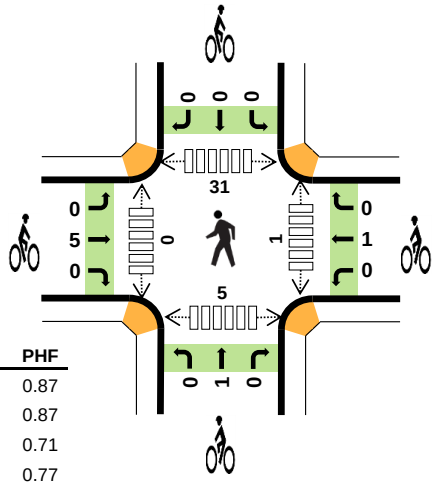
Interval Start	JEFFERSON AVE Eastbound			JEFFERSON AVE Westbound			DRIVEWAY Northbound			AVE DEL ORA Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
4:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	2	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	2	5
5:00 PM	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	6
5:15 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	5
5:30 PM	**0**	**1**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	8
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**
Count Total	0	5	0	0	6	0	0	0	0	0	0	0	11	0
Peak Hour	**0**	**3**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

MYRTLE ST
JEFFERSON ST

Date: 10/17/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM





	HV %:	PHF
EB	1.1%	0.87
WB	1.9%	0.87
NB	0.0%	0.71
SB	1.1%	0.77
TOTAL	1.4%	0.91

Two-Hour Count Summaries

Interval Start	JEFFERSON ST Eastbound				JEFFERSON ST Westbound				MYRTLE ST Northbound				MYRTLE ST Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	1	118	0	0	0	82	2	0	1	0	2	0	1	0	6	213	0
7:15 AM	0	4	177	0	0	6	127	2	0	0	0	1	0	1	0	5	323	0
7:30 AM	0	2	221	1	0	5	172	4	0	0	0	3	0	1	0	10	419	0
7:45 AM	**0**	**11**	**306**	**1**	**0**	**1**	**267**	**4**	**0**	**0**	**0**	**5**	**0**	**1**	**0**	**18**	**614**	1,569
8:00 AM	**0**	**19**	**332**	**0**	**2**	**3**	**235**	**13**	**0**	**0**	**0**	**10**	**0**	**3**	**0**	**26**	**643**	1,999
8:15 AM	**0**	**7**	**354**	**0**	**0**	**8**	**211**	**14**	**0**	**0**	**0**	**12**	**0**	**5**	**0**	**24**	**635**	2,311
8:30 AM	**0**	**2**	**228**	**0**	**0**	**1**	**189**	**2**	**0**	**1**	**0**	**6**	**0**	**2**	**0**	**10**	**441**	**2,333**
8:45 AM	0	5	206	0	0	3	145	1	0	0	0	0	0	1	0	10	371	2,090
Count Total	0	51	1,942	2	2	27	1,428	42	0	2	0	39	0	15	0	109	3,659	0
Peak Hour All	**0**	**39**	**1,220**	**1**	**2**	**13**	**902**	**33**	**0**	**1**	**0**	**33**	**0**	**11**	**0**	**78**	**2,333**	**0**
Peak Hour HV	**0**	**0**	**14**	**0**	**0**	**0**	**15**	**3**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**33**	**0**
Peak Hour HV%	**-**	**0%**	**1%**	**0%**	**0%**	**0%**	**2%**	**9%**	**-**	**0%**	**-**	**0%**	**-**	**9%**	**-**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	1	6	0	0	*7*	1	0	0	0	*1*	0	1	1	3	*5*
7:15 AM	3	3	0	0	*6*	2	0	0	0	*2*	0	0	2	1	*3*
7:30 AM	5	2	0	0	*7*	2	0	0	0	*2*	0	0	0	2	*2*
7:45 AM	**3**	**2**	**0**	**1**	***6***	**2**	**0**	**1**	**0**	***3***	**0**	**0**	**6**	**1**	*7*
8:00 AM	**1**	**10**	**0**	**0**	***11***	**1**	**0**	**0**	**0**	***1***	**1**	**0**	**13**	**0**	*14*
8:15 AM	**5**	**3**	**0**	**0**	***8***	**2**	**0**	**0**	**0**	***2***	**0**	**0**	**6**	**4**	*10*
8:30 AM	**5**	**3**	**0**	**0**	***8***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**6**	**0**	***6***
8:45 AM	5	2	0	0	*7*	2	3	0	1	*6*	0	0	3	0	*3*
Count Total	28	31	0	1	*60*	12	4	1	1	*18*	1	1	37	11	*50*
Peak Hour	**14**	**18**	**0**	**1**	***33***	**5**	**1**	**1**	**0**	***7***	**1**	**0**	**31**	**5**	***37***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	JEFFERSON ST Eastbound				JEFFERSON ST Westbound				MYRTLE ST Northbound				MYRTLE ST Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	1	0	0	0	5	1	0	0	0	0	0	0	0	0	7	0
7:15 AM	0	0	3	0	0	0	2	1	0	0	0	0	0	0	0	0	6	0
7:30 AM	0	0	5	0	0	0	2	0	0	0	0	0	0	0	0	0	7	0
7:45 AM	**0**	**0**	**3**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**6**	26
8:00 AM	**0**	**0**	**1**	**0**	**0**	**0**	**9**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11**	30
8:15 AM	**0**	**0**	**5**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	32
8:30 AM	**0**	**0**	**5**	**0**	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**33**
8:45 AM	0	1	4	0	0	0	2	0	0	0	0	0	0	0	0	0	7	34
Count Total	0	1	27	0	0	0	26	5	0	0	0	0	0	1	0	0	60	0
Peak Hour	**0**	**0**	**14**	**0**	**0**	**0**	**15**	**3**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**33**	**0**

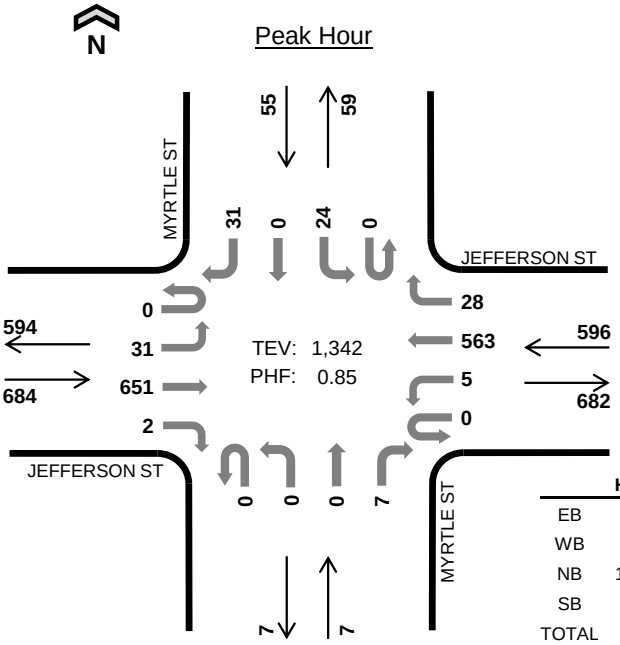
Two-Hour Count Summaries - Bikes

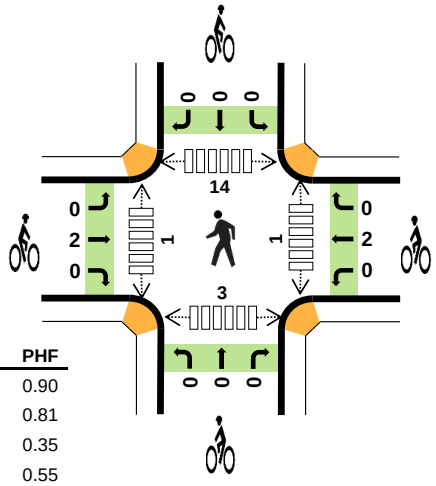
Interval Start	JEFFERSON ST Eastbound			JEFFERSON ST Westbound			MYRTLE ST Northbound			MYRTLE ST Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	0
7:15 AM	0	2	0	0	0	0	0	0	0	0	0	0	2	0
7:30 AM	0	2	0	0	0	0	0	0	0	0	0	0	2	0
7:45 AM	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**3**	8
8:00 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	8
8:15 AM	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	8
8:30 AM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**7**
8:45 AM	1	1	0	0	3	0	0	0	0	0	0	1	6	10
Count Total	1	11	0	0	4	0	0	1	0	0	0	1	18	0
Peak Hour	**0**	**5**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**7**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

MYRTLE ST
JEFFERSON ST

Date: 10/17/2017
Count Period: 1:00 PM to 3:00 PM
Peak Hour: 2:00 PM to 3:00 PM





	HV %:	PHF
EB	1.9%	0.90
WB	1.5%	0.81
NB	14.3%	0.35
SB	1.8%	0.55
TOTAL	1.8%	0.85

Two-Hour Count Summaries

Interval Start	JEFFERSON ST Eastbound				JEFFERSON ST Westbound				MYRTLE ST Northbound				MYRTLE ST Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
1:00 PM	0	6	156	0	0	1	118	4	0	0	0	0	0	0	1	6	292	0
1:15 PM	0	5	157	1	0	1	151	1	0	0	0	1	0	1	0	3	321	0
1:30 PM	0	9	157	0	0	2	126	2	0	0	0	1	0	1	0	4	302	0
1:45 PM	0	4	142	1	0	2	102	3	0	0	0	3	0	2	0	4	263	1,178
2:00 PM	**0**	**2**	**159**	**0**	**0**	**3**	**109**	**6**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**3**	**283**	1,169
2:15 PM	**0**	**10**	**145**	**0**	**0**	**0**	**128**	**12**	**0**	**0**	**0**	**2**	**0**	**3**	**0**	**4**	**304**	1,152
2:30 PM	**0**	**9**	**181**	**0**	**0**	**1**	**146**	**6**	**0**	**0**	**0**	**0**	**0**	**13**	**0**	**6**	**362**	1,212
2:45 PM	**0**	**10**	**166**	**2**	**0**	**1**	**180**	**4**	**0**	**0**	**0**	**5**	**0**	**7**	**0**	**18**	**393**	**1,342**
Count Total	0	55	1,263	4	0	11	1,060	38	0	0	0	12	0	28	1	48	2,520	0
Peak Hour All	**0**	**31**	**651**	**2**	**0**	**5**	**563**	**28**	**0**	**0**	**0**	**7**	**0**	**24**	**0**	**31**	**1,342**	**0**
Peak Hour HV	**0**	**0**	**13**	**0**	**0**	**0**	**9**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**24**	**0**
Peak Hour HV%	**-**	**0%**	**2%**	**0%**	**-**	**0%**	**2%**	**0%**	**-**	**-**	**-**	**14%**	**-**	**0%**	**-**	**3%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
1:00 PM	5	2	0	0	*7*	0	0	0	1	*1*	0	0	0	0	*0*
1:15 PM	2	3	0	0	*5*	1	0	0	0	*1*	0	0	0	0	*0*
1:30 PM	2	3	0	0	*5*	2	0	0	0	*2*	0	0	0	1	*1*
1:45 PM	7	4	0	0	*11*	0	0	0	0	*0*	0	0	0	1	*1*
2:00 PM	**2**	**1**	**0**	**1**	***4***	**0**	**2**	**0**	**0**	***2***	**0**	**0**	**3**	**1**	*4*
2:15 PM	**4**	**3**	**1**	**0**	***8***	**1**	**0**	**0**	**0**	***1***	**1**	**0**	**2**	**1**	*4*
2:30 PM	**4**	**2**	**0**	**0**	***6***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**9**	**1**	*10*
2:45 PM	**3**	**3**	**0**	**0**	***6***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	***1***
Count Total	29	21	1	1	*52*	5	2	0	1	*8*	1	1	14	5	*21*
Peak Hour	**13**	**9**	**1**	**1**	***24***	**2**	**2**	**0**	**0**	***4***	**1**	**1**	**14**	**3**	***19***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	JEFFERSON ST Eastbound				JEFFERSON ST Westbound				MYRTLE ST Northbound				MYRTLE ST Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
1:00 PM	0	0	5	0	0	1	1	0	0	0	0	0	0	0	0	0	7	0
1:15 PM	0	1	1	0	0	0	3	0	0	0	0	0	0	0	0	0	5	0
1:30 PM	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5	0
1:45 PM	0	0	7	0	0	0	4	0	0	0	0	0	0	0	0	0	11	28
2:00 PM	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**4**	25
2:15 PM	**0**	**0**	**4**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**8**	28
2:30 PM	**0**	**0**	**4**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	29
2:45 PM	**0**	**0**	**3**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**24**
Count Total	0	1	28	0	0	1	20	0	0	0	0	1	0	0	0	1	52	0
Peak Hour	**0**	**0**	**13**	**0**	**0**	**0**	**9**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**24**	**0**

Two-Hour Count Summaries - Bikes

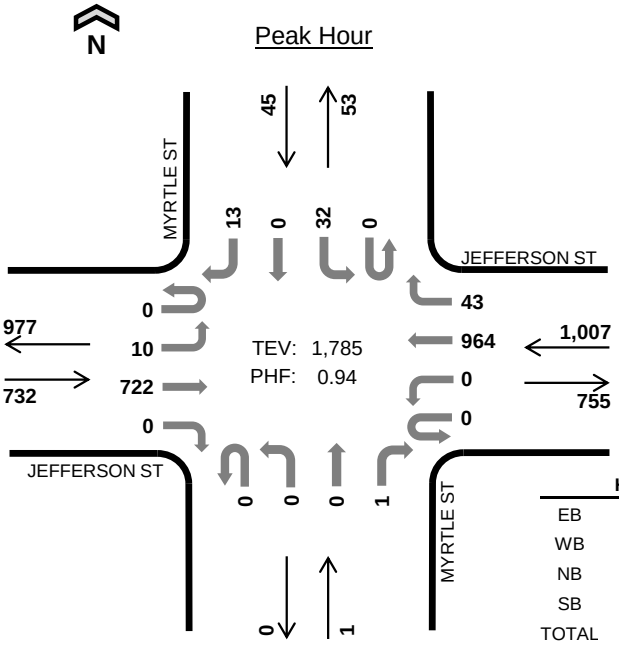
Interval Start	JEFFERSON ST Eastbound			JEFFERSON ST Westbound			MYRTLE ST Northbound			MYRTLE ST Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0
1:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	0
1:30 PM	0	2	0	0	0	0	0	0	0	0	0	0	2	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	4
2:00 PM	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	5
2:15 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	5
2:30 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	4
2:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**
Count Total	0	5	0	0	2	0	0	0	0	0	0	1	8	0
Peak Hour	**0**	**2**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**

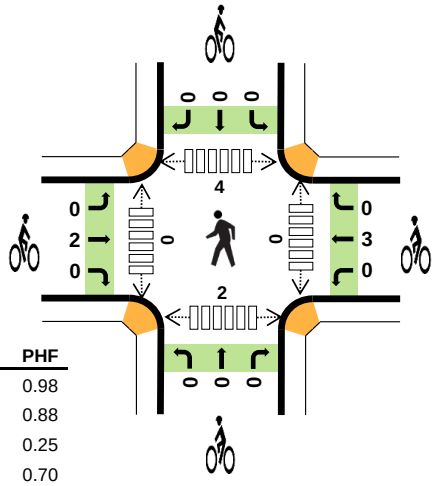
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

MYRTLE ST
JEFFERSON ST

Date: 10/17/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM

Peak Hour





	HV %:	PHF
EB	0.5%	0.98
WB	0.5%	0.88
NB	0.0%	0.25
SB	0.0%	0.70
TOTAL	0.5%	0.94

Two-Hour Count Summaries

Interval Start		JEFFERSON ST Eastbound				JEFFERSON ST Westbound				MYRTLE ST Northbound				MYRTLE ST Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		1	3	170	0	0	0	201	4	0	0	0	0	0	2	0	2	383	0
4:15 PM		1	2	181	0	0	0	167	5	0	0	0	0	0	5	0	5	366	0
4:30 PM		0	0	180	0	0	0	220	7	0	0	0	0	0	7	0	4	418	0
4:45 PM		**0**	**0**	**181**	**0**	**0**	**0**	**217**	**13**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**3**	**420**	1,587
5:00 PM		**0**	**6**	**175**	**0**	**0**	**0**	**274**	**11**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**3**	**477**	1,681
5:15 PM		**0**	**2**	**181**	**0**	**0**	**0**	**248**	**9**	**0**	**0**	**0**	**0**	**0**	**11**	**0**	**5**	**456**	1,771
5:30 PM		**0**	**2**	**185**	**0**	**0**	**0**	**225**	**10**	**0**	**0**	**0**	**1**	**0**	**7**	**0**	**2**	**432**	**1,785**
5:45 PM		0	5	121	0	0	0	241	10	0	0	0	0	0	4	0	2	383	1,748
Count Total		2	20	1,374	0	0	0	1,793	69	0	0	0	1	0	50	0	26	3,335	0
Peak Hour	**All**	**0**	**10**	**722**	**0**	**0**	**0**	**964**	**43**	**0**	**0**	**0**	**1**	**0**	**32**	**0**	**13**	**1,785**	**0**
	HV	**0**	**0**	**4**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**0**
	HV%	**-**	**0%**	**1%**	**-**	**-**	**-**	**1%**	**0%**	**-**	**-**	**-**	**0%**	**-**	**0%**	**-**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	2	4	0	0	*6*	0	1	0	0	*1*	0	0	2	1	*3*
4:15 PM	1	1	0	0	*2*	0	1	0	0	*1*	0	0	2	0	*2*
4:30 PM	1	3	0	0	*4*	0	0	0	0	*0*	0	0	2	1	*3*
4:45 PM	**1**	**0**	**0**	**0**	***1***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**1**	**1**	**0**	**0**	***2***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**2**	**0**	*2*
5:15 PM	**2**	**3**	**0**	**0**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**2**	**2**	*4*
5:30 PM	**0**	**1**	**0**	**0**	***1***	**1**	**2**	**0**	**0**	***3***	**0**	**0**	**0**	**0**	***0***
5:45 PM	1	1	0	0	*2*	0	0	0	0	*0*	0	0	0	5	*5*
Count Total	9	14	0	0	*23*	2	5	0	0	*7*	0	0	10	9	*19*
Peak Hour	**4**	**5**	**0**	**0**	***9***	**2**	**3**	**0**	**0**	***5***	**0**	**0**	**4**	**2**	***6***

Two-Hour Count Summaries - Heavy Vehicles

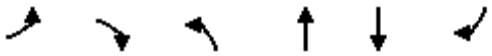
Interval Start	JEFFERSON ST Eastbound				JEFFERSON ST Westbound				MYRTLE ST Northbound				MYRTLE ST Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	2	0	0	0	4	0	0	0	0	0	0	0	0	0	6	0
4:15 PM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0
4:30 PM	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	4	0
4:45 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	13
5:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	9
5:15 PM	**0**	**0**	**2**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	12
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**9**
5:45 PM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	10
Count Total	0	0	9	0	0	0	13	1	0	0	0	0	0	0	0	0	23	0
Peak Hour	**0**	**0**	**4**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	JEFFERSON ST Eastbound			JEFFERSON ST Westbound			MYRTLE ST Northbound			MYRTLE ST Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
4:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	3
5:00 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	3
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
5:30 PM	**0**	**1**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**5**
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Count Total	0	2	0	0	5	0	0	0	0	0	0	0	7	0
Peak Hour	**0**	**2**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

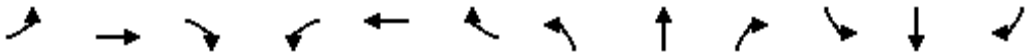
Appendix C – Existing Conditions Intersections Level of Service Worksheets



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	29	46	39	1240	925	104
Future Volume (Veh/h)	29	46	39	1240	925	104
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.57	0.57	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	51	81	45	1442	1016	114
Pedestrians	12					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	1					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1896	577	1142			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1896	577	1142			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	9	82	93			
cM capacity (veh/h)	56	454	601			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	132	526	961	677	453
Volume Left	51	45	0	0	0
Volume Right	81	0	0	0	114
cSH	121	601	1700	1700	1700
Volume to Capacity	1.09	0.07	0.57	0.40	0.27
Queue Length 95th (ft)	193	6	0	0	0
Control Delay (s)	176.7	2.1	0.0	0.0	0.0
Lane LOS	F	A			
Approach Delay (s)	176.7	0.7		0.0	
Approach LOS	F				

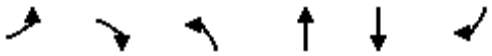
Intersection Summary			
Average Delay	8.9		
Intersection Capacity Utilization	73.6%	ICU Level of Service	D
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	0	78	0	0	33	39	1220	1	15	902	33
Future Volume (Veh/h)	11	0	78	0	0	33	39	1220	1	15	902	33
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.77	0.77	0.77	0.71	0.71	0.71	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	14	0	101	0	0	46	45	1402	1	17	1037	38
Pedestrians		31			5						1	
Lane Width (ft)		12.0			12.0						12.0	
Walking Speed (ft/s)		3.5			3.5						3.5	
Percent Blockage		3			0						0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1959	2619	568	2151	2638	708	1106			1408		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1959	2619	568	2151	2638	708	1106			1408		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	52	100	78	100	100	88	93			96		
cM capacity (veh/h)	29	20	452	19	20	375	609			478		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	115	46	45	935	468	17	691	384
Volume Left	14	0	45	0	0	17	0	0
Volume Right	101	46	0	0	1	0	0	38
cSH	162	375	609	1700	1700	478	1700	1700
Volume to Capacity	0.71	0.12	0.07	0.55	0.28	0.04	0.41	0.23
Queue Length 95th (ft)	106	10	6	0	0	3	0	0
Control Delay (s)	68.1	15.9	11.4	0.0	0.0	12.8	0.0	0.0
Lane LOS	F	C	B			B		
Approach Delay (s)	68.1	15.9	0.4			0.2		
Approach LOS	F	C						

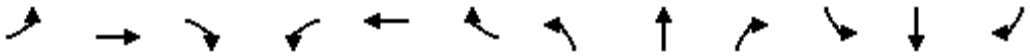
Intersection Summary				
Average Delay	3.4			
Intersection Capacity Utilization	52.8%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	30	23	12	639	682	21
Future Volume (Veh/h)	30	23	12	639	682	21
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.46	0.46	0.90	0.90	0.80	0.80
Hourly flow rate (vph)	65	50	13	710	853	26
Pedestrians	3					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1250	442	882			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1250	442	882			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	60	91	98			
cM capacity (veh/h)	162	561	760			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	115	250	473	569	310
Volume Left	65	13	0	0	0
Volume Right	50	0	0	0	26
cSH	234	760	1700	1700	1700
Volume to Capacity	0.49	0.02	0.28	0.33	0.18
Queue Length 95th (ft)	62	1	0	0	0
Control Delay (s)	34.4	0.7	0.0	0.0	0.0
Lane LOS	D	A			
Approach Delay (s)	34.4	0.2		0.0	
Approach LOS	D				

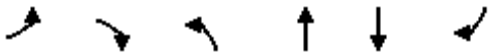
Intersection Summary				
Average Delay	2.4			
Intersection Capacity Utilization	36.2%	ICU Level of Service		A
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	0	31	0	0	7	31	651	2	5	563	28
Future Volume (Veh/h)	24	0	31	0	0	7	31	651	2	5	563	28
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.55	0.55	0.55	0.35	0.35	0.35	0.90	0.90	0.90	0.81	0.81	0.81
Hourly flow rate (vph)	44	0	56	0	0	20	34	723	2	6	695	35
Pedestrians		14			3			1			1	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		3.5			3.5			3.5			3.5	
Percent Blockage		1			0			0			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1189	1534	380	1212	1551	366	744			728		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1189	1534	380	1212	1551	366	744			728		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	66	100	91	100	100	97	96			99		
cM capacity (veh/h)	130	108	609	119	106	628	848			869		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	100	20	34	482	243	6	463	267
Volume Left	44	0	34	0	0	6	0	0
Volume Right	56	20	0	0	2	0	0	35
cSH	233	628	848	1700	1700	869	1700	1700
Volume to Capacity	0.43	0.03	0.04	0.28	0.14	0.01	0.27	0.16
Queue Length 95th (ft)	50	2	3	0	0	1	0	0
Control Delay (s)	31.6	10.9	9.4	0.0	0.0	9.2	0.0	0.0
Lane LOS	D	B	A			A		
Approach Delay (s)	31.6	10.9	0.4			0.1		
Approach LOS	D	B						

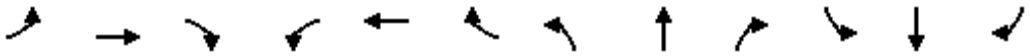
Intersection Summary				
Average Delay	2.3			
Intersection Capacity Utilization	41.5%	ICU Level of Service		A
Analysis Period (min)	15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	31	12	17	709	1060	40
Future Volume (Veh/h)	31	12	17	709	1060	40
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.67	0.67	0.92	0.92	0.95	0.95
Hourly flow rate (vph)	46	18	18	771	1116	42
Pedestrians	4					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1562	583	1162			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1562	583	1162			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	54	96	97			
cM capacity (veh/h)	99	454	595			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	64	275	514	744	414
Volume Left	46	18	0	0	0
Volume Right	18	0	0	0	42
cSH	127	595	1700	1700	1700
Volume to Capacity	0.50	0.03	0.30	0.44	0.24
Queue Length 95th (ft)	59	2	0	0	0
Control Delay (s)	59.2	1.1	0.0	0.0	0.0
Lane LOS	F	A			
Approach Delay (s)	59.2	0.4		0.0	
Approach LOS	F				

Intersection Summary			
Average Delay	2.0		
Intersection Capacity Utilization	41.8%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	0	13	0	0	1	10	722	0	0	964	43
Future Volume (Veh/h)	32	0	13	0	0	1	10	722	0	0	964	43
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.70	0.70	0.70	0.25	0.25	0.25	0.98	0.98	0.98	0.88	0.88	0.88
Hourly flow rate (vph)	46	0	19	0	0	4	10	737	0	0	1095	49
Pedestrians		4			2							
Lane Width (ft)		12.0			12.0							
Walking Speed (ft/s)		3.5			3.5							
Percent Blockage		0			0							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1516	1882	576	1326	1907	370	1148			739		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1516	1882	576	1326	1907	370	1148			739		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	42	100	96	100	100	99	98			100		
cM capacity (veh/h)	80	69	459	107	66	626	602			861		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	65	4	10	491	246	0	730	414
Volume Left	46	0	10	0	0	0	0	0
Volume Right	19	4	0	0	0	0	0	49
cSH	105	626	602	1700	1700	1700	1700	1700
Volume to Capacity	0.62	0.01	0.02	0.29	0.14	0.00	0.43	0.24
Queue Length 95th (ft)	76	0	1	0	0	0	0	0
Control Delay (s)	83.4	10.8	11.1	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	B	B					
Approach Delay (s)	83.4	10.8	0.1			0.0		
Approach LOS	F	B						

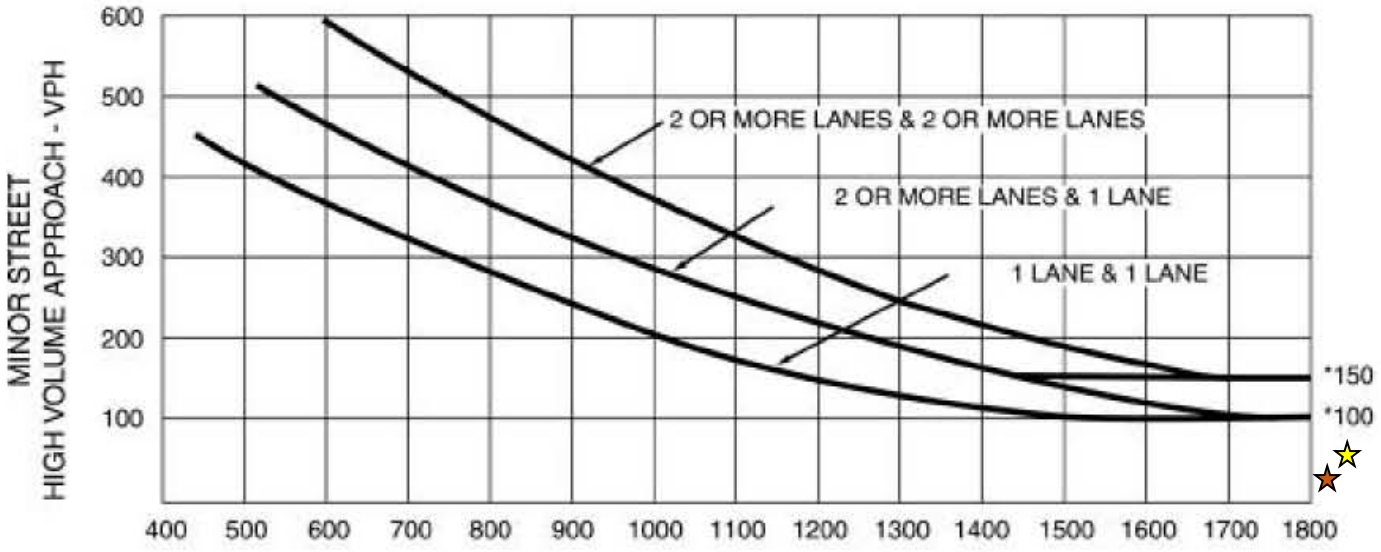
Intersection Summary				
Average Delay	2.8			
Intersection Capacity Utilization	38.0%	ICU Level of Service	A	
Analysis Period (min)	15			

Peak Hour Signal Warrant Analysis

Intersection: Avenue Del Ora/Jefferson Avenue
Scenario: Existing Conditions

A.M. & P.M. Peak Hour Warrant (Urban Areas)

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Notes:
☆A.M. Peak Hour: Major (Minor) Street Volume = 2308 (75) VPH
★P.M. Peak Hour: Major (Minor) Street Volume = 1826 (43) VPH

A signal is not warranted for the A.M. & P.M. Peak Hour

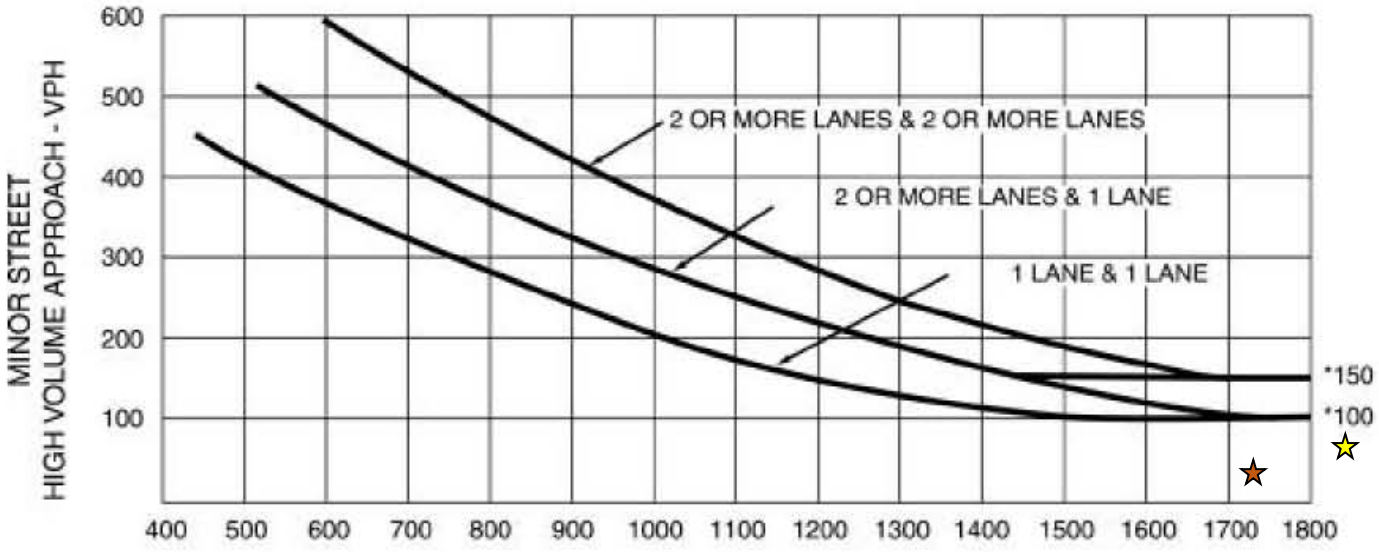
Source: CA MUTCD 2014, Chapter 4C – Traffic Control Signal Needs Studies, Part 4 - Highway Traffic Signals, Figure 4C-3

Peak Hour Signal Warrant Analysis

Intersection: Myrtle Street/Jefferson Avenue
Scenario: Existing Conditions

A.M. & P.M. Peak Hour Warrant (Urban Areas)

Figure 4C-3. Warrant 3, Peak Hour



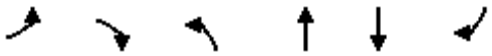
*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Notes:
☆A.M. Peak Hour: Major (Minor) Street Volume = 2210 (89) VPH
★P.M. Peak Hour: Major (Minor) Street Volume = 1739 (45) VPH

A signal is not warranted for the A.M. & P.M. Peak Hour

Source: CA MUTCD 2014, Chapter 4C – Traffic Control Signal Needs Studies, Part 4 - Highway Traffic Signals, Figure 4C-3

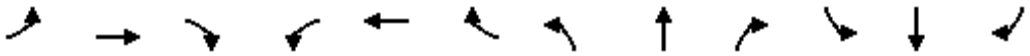
Appendix D – Existing plus Project Conditions Intersections Level of Service Worksheets



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	35	52	49	1248	927	122
Future Volume (Veh/h)	35	52	49	1248	927	122
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.57	0.57	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	61	91	57	1451	1019	134
Pedestrians	12					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	1					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1938	588	1165			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1938	588	1165			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	0	80	90			
cM capacity (veh/h)	51	447	589			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	152	541	967	679	474
Volume Left	61	57	0	0	0
Volume Right	91	0	0	0	134
cSH	109	589	1700	1700	1700
Volume to Capacity	1.39	0.10	0.57	0.40	0.28
Queue Length 95th (ft)	267	8	0	0	0
Control Delay (s)	295.2	2.7	0.0	0.0	0.0
Lane LOS	F	A			
Approach Delay (s)	295.2	1.0		0.0	
Approach LOS	F				

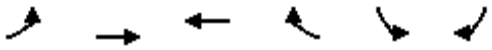
Intersection Summary			
Average Delay	16.5		
Intersection Capacity Utilization	80.7%	ICU Level of Service	D
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	0	80	0	0	33	47	1226	1	15	920	55
Future Volume (Veh/h)	17	0	80	0	0	33	47	1226	1	15	920	55
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.77	0.77	0.77	0.71	0.71	0.71	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	22	0	104	0	0	46	54	1409	1	17	1057	63
Pedestrians		31			5						1	
Lane Width (ft)		12.0			12.0						12.0	
Walking Speed (ft/s)		3.5			3.5						3.5	
Percent Blockage		3			0						0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2013	2676	591	2189	2708	711	1151			1415		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2013	2676	591	2189	2708	711	1151			1415		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	15	100	76	100	100	88	91			96		
cM capacity (veh/h)	26	18	437	17	18	373	585			475		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	126	46	54	939	471	17	705	415
Volume Left	22	0	54	0	0	17	0	0
Volume Right	104	46	0	0	1	0	0	63
cSH	116	373	585	1700	1700	475	1700	1700
Volume to Capacity	1.09	0.12	0.09	0.55	0.28	0.04	0.41	0.24
Queue Length 95th (ft)	189	10	8	0	0	3	0	0
Control Delay (s)	181.1	16.0	11.8	0.0	0.0	12.9	0.0	0.0
Lane LOS	F	C	B			B		
Approach Delay (s)	181.1	16.0	0.4			0.2		
Approach LOS	F	C						

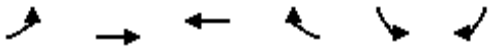
Intersection Summary				
Average Delay	8.8			
Intersection Capacity Utilization	58.3%	ICU Level of Service	B	
Analysis Period (min)	15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	87	147	24	0	0
Future Volume (Veh/h)	0	87	147	24	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	95	160	26	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	186				268	173
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	186				268	173
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	1388				721	871

Direction, Lane #	EB 1	WB 1
Volume Total	95	186
Volume Left	0	0
Volume Right	0	26
cSH	1700	1700
Volume to Capacity	0.06	0.11
Queue Length 95th (ft)	0	0
Control Delay (s)	0.0	0.0
Lane LOS		
Approach Delay (s)	0.0	0.0
Approach LOS		

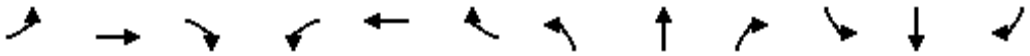
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	12.5%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	12	76	147	0	11	23
Future Volume (Veh/h)	12	76	147	0	11	23
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	13	83	160	0	12	25
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	160				269	160
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	160				269	160
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				98	97
cM capacity (veh/h)	1419				714	885

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	96	160	37
Volume Left	13	0	12
Volume Right	0	0	25
cSH	1419	1700	821
Volume to Capacity	0.01	0.09	0.05
Queue Length 95th (ft)	1	0	4
Control Delay (s)	1.1	0.0	9.6
Lane LOS	A		A
Approach Delay (s)	1.1	0.0	9.6
Approach LOS			A

Intersection Summary			
Average Delay	1.6		
Intersection Capacity Utilization	24.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	82	0	15	151	4	0	8	5	1	3	2
Future Volume (Veh/h)	0	82	0	15	151	4	0	8	5	1	3	2
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	89	0	16	164	4	0	9	5	1	3	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	168			89			290	289	89	296	287	166
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	168			89			290	289	89	296	287	166
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			100	99	99	100	100	100
cM capacity (veh/h)	1410			1506			652	614	969	640	616	878

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	89	184	14	6
Volume Left	0	16	0	1
Volume Right	0	4	5	2
cSH	1410	1506	707	689
Volume to Capacity	0.00	0.01	0.02	0.01
Queue Length 95th (ft)	0	1	2	1
Control Delay (s)	0.0	0.7	10.2	10.3
Lane LOS		A	B	B
Approach Delay (s)	0.0	0.7	10.2	10.3
Approach LOS			B	B

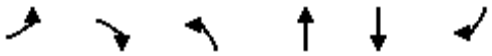
Intersection Summary				
Average Delay	1.2			
Intersection Capacity Utilization	25.7%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	89	19	20	82	23	8
Future Volume (Veh/h)	89	19	20	82	23	8
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	97	21	22	89	25	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			118		240	108
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			118		240	108
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		97	99
cM capacity (veh/h)			1470		737	946

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	118	111	34
Volume Left	0	22	25
Volume Right	21	0	9
cSH	1700	1470	783
Volume to Capacity	0.07	0.01	0.04
Queue Length 95th (ft)	0	1	3
Control Delay (s)	0.0	1.6	9.8
Lane LOS		A	A
Approach Delay (s)	0.0	1.6	9.8
Approach LOS			A

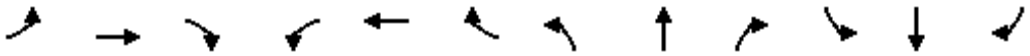
Intersection Summary			
Average Delay	1.9		
Intersection Capacity Utilization	22.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	36	29	22	647	684	39
Future Volume (Veh/h)	36	29	22	647	684	39
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.46	0.46	0.90	0.90	0.80	0.80
Hourly flow rate (vph)	78	63	24	719	855	49
Pedestrians	3					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1290	455	907			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1290	455	907			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	48	89	97			
cM capacity (veh/h)	150	551	744			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	141	264	479	570	334
Volume Left	78	24	0	0	0
Volume Right	63	0	0	0	49
cSH	222	744	1700	1700	1700
Volume to Capacity	0.64	0.03	0.28	0.34	0.20
Queue Length 95th (ft)	95	2	0	0	0
Control Delay (s)	45.8	1.3	0.0	0.0	0.0
Lane LOS	E	A			
Approach Delay (s)	45.8	0.4		0.0	
Approach LOS	E				

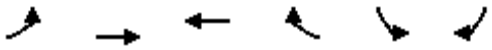
Intersection Summary				
Average Delay	3.8			
Intersection Capacity Utilization	44.3%	ICU Level of Service		A
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	0	33	0	0	7	39	657	2	5	581	40
Future Volume (Veh/h)	30	0	33	0	0	7	39	657	2	5	581	40
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.55	0.55	0.55	0.35	0.35	0.35	0.90	0.90	0.90	0.81	0.81	0.81
Hourly flow rate (vph)	55	0	60	0	0	20	43	730	2	6	717	49
Pedestrians		14			3			1			1	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		3.5			3.5			3.5			3.5	
Percent Blockage		1			0			0			0	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1240	1588	398	1252	1612	370	780			735		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1240	1588	398	1252	1612	370	780			735		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	54	100	90	100	100	97	95			99		
cM capacity (veh/h)	118	99	593	109	96	625	822			864		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	115	20	43	487	245	6	478	288
Volume Left	55	0	43	0	0	6	0	0
Volume Right	60	20	0	0	2	0	0	49
cSH	203	625	822	1700	1700	864	1700	1700
Volume to Capacity	0.57	0.03	0.05	0.29	0.14	0.01	0.28	0.17
Queue Length 95th (ft)	76	2	4	0	0	1	0	0
Control Delay (s)	43.5	11.0	9.6	0.0	0.0	9.2	0.0	0.0
Lane LOS	E	B	A			A		
Approach Delay (s)	43.5	11.0	0.5			0.1		
Approach LOS	E	B						

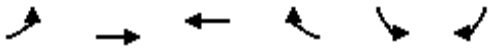
Intersection Summary				
Average Delay	3.4			
Intersection Capacity Utilization	42.1%	ICU Level of Service		A
Analysis Period (min)	15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	65	37	24	0	0
Future Volume (Veh/h)	0	65	37	24	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	71	40	26	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	66				124	53
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	66				124	53
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	1536				871	1014

Direction, Lane #	EB 1	WB 1
Volume Total	71	66
Volume Left	0	0
Volume Right	0	26
cSH	1700	1700
Volume to Capacity	0.04	0.04
Queue Length 95th (ft)	0	0
Control Delay (s)	0.0	0.0
Lane LOS		
Approach Delay (s)	0.0	0.0
Approach LOS		

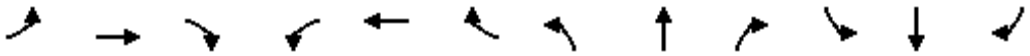
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	6.8%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	12	54	37	0	11	23
Future Volume (Veh/h)	12	54	37	0	11	23
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	13	59	40	0	12	25
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	40				125	40
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	40				125	40
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				99	98
cM capacity (veh/h)	1570				863	1031

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	72	40	37
Volume Left	13	0	12
Volume Right	0	0	25
cSH	1570	1700	970
Volume to Capacity	0.01	0.02	0.04
Queue Length 95th (ft)	1	0	3
Control Delay (s)	1.4	0.0	8.9
Lane LOS	A		A
Approach Delay (s)	1.4	0.0	8.9
Approach LOS			A

Intersection Summary			
Average Delay		2.9	
Intersection Capacity Utilization		20.2%	ICU Level of Service A
Analysis Period (min)		15	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	60	0	15	41	4	0	8	5	1	3	2
Future Volume (Veh/h)	0	60	0	15	41	4	0	8	5	1	3	2
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	65	0	16	45	4	0	9	5	1	3	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	49			65			148	146	65	154	144	47
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	49			65			148	146	65	154	144	47
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			100	99	99	100	100	100
cM capacity (veh/h)	1558			1537			810	738	999	795	739	1022

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	65	65	14	6
Volume Left	0	16	0	1
Volume Right	0	4	5	2
cSH	1558	1537	814	825
Volume to Capacity	0.00	0.01	0.02	0.01
Queue Length 95th (ft)	0	1	1	1
Control Delay (s)	0.0	1.9	9.5	9.4
Lane LOS		A	A	A
Approach Delay (s)	0.0	1.9	9.5	9.4
Approach LOS			A	A

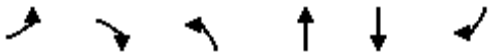
Intersection Summary				
Average Delay	2.1			
Intersection Capacity Utilization	19.9%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	55	19	20	59	23	8
Future Volume (Veh/h)	55	19	20	59	23	8
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	60	21	22	64	25	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			81		178	70
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			81		178	70
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		97	99
cM capacity (veh/h)			1517		799	992

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	81	86	34
Volume Left	0	22	25
Volume Right	21	0	9
cSH	1700	1517	843
Volume to Capacity	0.05	0.01	0.04
Queue Length 95th (ft)	0	1	3
Control Delay (s)	0.0	2.0	9.5
Lane LOS		A	A
Approach Delay (s)	0.0	2.0	9.5
Approach LOS			A

Intersection Summary			
Average Delay		2.4	
Intersection Capacity Utilization		20.9%	ICU Level of Service A
Analysis Period (min)		15	



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	34	15	20	711	1061	45
Future Volume (Veh/h)	34	15	20	711	1061	45
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.67	0.67	0.92	0.92	0.95	0.95
Hourly flow rate (vph)	51	22	22	773	1117	47
Pedestrians	4					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1575	586	1168			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1575	586	1168			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	47	95	96			
cM capacity (veh/h)	96	452	592			

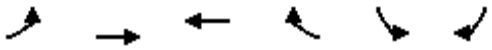
Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	73	280	515	745	419
Volume Left	51	22	0	0	0
Volume Right	22	0	0	0	47
cSH	126	592	1700	1700	1700
Volume to Capacity	0.58	0.04	0.30	0.44	0.25
Queue Length 95th (ft)	72	3	0	0	0
Control Delay (s)	66.6	1.3	0.0	0.0	0.0
Lane LOS	F	A			
Approach Delay (s)	66.6	0.5		0.0	
Approach LOS	F				

Intersection Summary			
Average Delay	2.6		
Intersection Capacity Utilization	44.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	0	14	0	0	1	12	725	0	0	969	47
Future Volume (Veh/h)	34	0	14	0	0	1	12	725	0	0	969	47
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.70	0.70	0.70	0.25	0.25	0.25	0.98	0.98	0.98	0.88	0.88	0.88
Hourly flow rate (vph)	49	0	20	0	0	4	12	740	0	0	1101	53
Pedestrians		4			2							
Lane Width (ft)		12.0			12.0							
Walking Speed (ft/s)		3.5			3.5							
Percent Blockage		0			0							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1530	1898	581	1336	1924	372	1158			742		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1530	1898	581	1336	1924	372	1158			742		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	37	100	96	100	100	99	98			100		
cM capacity (veh/h)	78	67	455	104	64	624	597			859		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	69	4	12	493	247	0	734	420
Volume Left	49	0	12	0	0	0	0	0
Volume Right	20	4	0	0	0	0	0	53
cSH	102	624	597	1700	1700	1700	1700	1700
Volume to Capacity	0.67	0.01	0.02	0.29	0.15	0.00	0.43	0.25
Queue Length 95th (ft)	85	0	2	0	0	0	0	0
Control Delay (s)	93.6	10.8	11.2	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	B	B					
Approach Delay (s)	93.6	10.8	0.2			0.0		
Approach LOS	F	B						

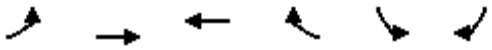
Intersection Summary				
Average Delay	3.4			
Intersection Capacity Utilization	38.3%	ICU Level of Service		A
Analysis Period (min)	15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	49	60	5	0	0
Future Volume (Veh/h)	0	49	60	5	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	53	65	5	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	70				120	68
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	70				120	68
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	1531				875	996

Direction, Lane #	EB 1	WB 1
Volume Total	53	70
Volume Left	0	0
Volume Right	0	5
cSH	1700	1700
Volume to Capacity	0.03	0.04
Queue Length 95th (ft)	0	0
Control Delay (s)	0.0	0.0
Lane LOS		
Approach Delay (s)	0.0	0.0
Approach LOS		

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	6.8%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	4	44	60	0	5	5
Future Volume (Veh/h)	4	44	60	0	5	5
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	4	48	65	0	5	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	65				121	65
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	65				121	65
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				99	99
cM capacity (veh/h)	1537				872	999

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	52	65	10
Volume Left	4	0	5
Volume Right	0	0	5
cSH	1537	1700	931
Volume to Capacity	0.00	0.04	0.01
Queue Length 95th (ft)	0	0	1
Control Delay (s)	0.6	0.0	8.9
Lane LOS	A		A
Approach Delay (s)	0.6	0.0	8.9
Approach LOS			A

Intersection Summary			
Average Delay	0.9		
Intersection Capacity Utilization	15.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	45	0	4	58	3	0	2	2	1	2	2
Future Volume (Veh/h)	0	45	0	4	58	3	0	2	2	1	2	2
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	49	0	4	63	3	0	2	2	1	2	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	66			49			124	123	49	124	122	64
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	66			49			124	123	49	124	122	64
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	100	100	100
cM capacity (veh/h)	1536			1558			845	765	1020	845	767	1000

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	49	70	4	5
Volume Left	0	4	0	1
Volume Right	0	3	2	2
cSH	1536	1558	874	863
Volume to Capacity	0.00	0.00	0.00	0.01
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	0.0	0.4	9.1	9.2
Lane LOS		A	A	A
Approach Delay (s)	0.0	0.4	9.1	9.2
Approach LOS			A	A

Intersection Summary				
Average Delay	0.9			
Intersection Capacity Utilization	16.5%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	45	6	6	53	9	3
Future Volume (Veh/h)	45	6	6	53	9	3
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	49	7	7	58	10	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			56		124	52
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			56		124	52
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	100
cM capacity (veh/h)			1549		866	1015

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	56	65	13
Volume Left	0	7	10
Volume Right	7	0	3
cSH	1700	1549	897
Volume to Capacity	0.03	0.00	0.01
Queue Length 95th (ft)	0	0	1
Control Delay (s)	0.0	0.8	9.1
Lane LOS		A	A
Approach Delay (s)	0.0	0.8	9.1
Approach LOS			A

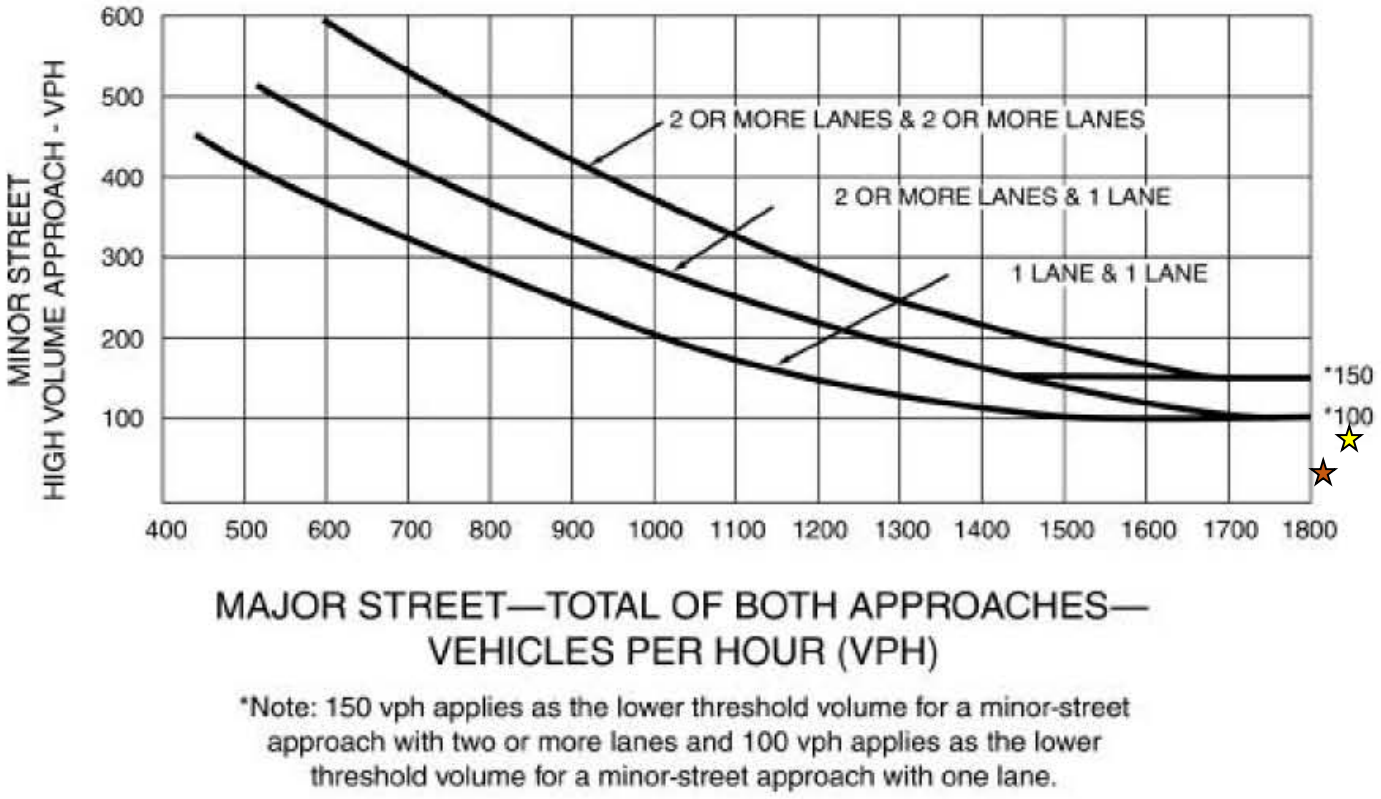
Intersection Summary			
Average Delay	1.3		
Intersection Capacity Utilization	17.8%	ICU Level of Service	A
Analysis Period (min)	15		

Peak Hour Signal Warrant Analysis

Intersection: Avenue Del Ora/Jefferson Avenue
Scenario: Existing plus Project Conditions

A.M. & P.M. Peak Hour Warrant (Urban Areas)

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Notes:
☆A.M. Peak Hour: Major (Minor) Street Volume = 2346 (87) VPH
★P.M. Peak Hour: Major (Minor) Street Volume = 1837 (49) VPH

A signal is not warranted for the A.M. & P.M. Peak Hour

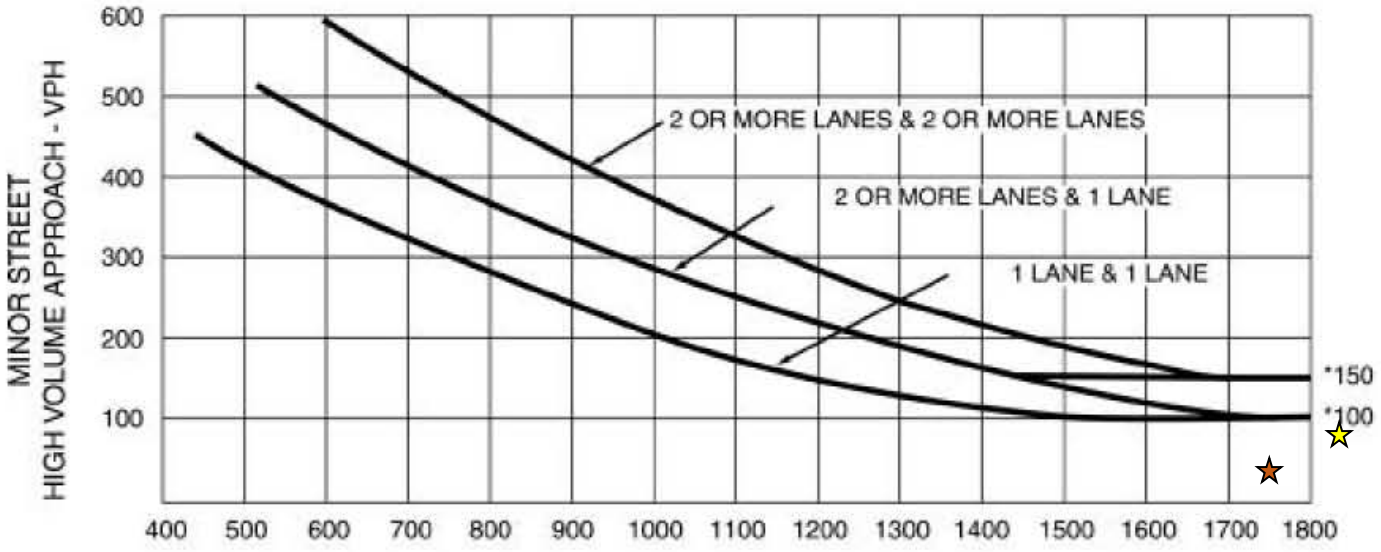
Source: CA MUTCD 2014, Chapter 4C – Traffic Control Signal Needs Studies, Part 4 - Highway Traffic Signals, Figure 4C-3

Peak Hour Signal Warrant Analysis

Intersection: Myrtle Street/Jefferson Avenue
Scenario: Existing plus Project Conditions

A.M. & P.M. Peak Hour Warrant (Urban Areas)

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Notes:
☆A.M. Peak Hour: Major (Minor) Street Volume = 2264 (97) VPH
★P.M. Peak Hour: Major (Minor) Street Volume = 1753 (48) VPH

A signal is not warranted for the A.M. & P.M. Peak Hour

Source: CA MUTCD 2014, Chapter 4C – Traffic Control Signal Needs Studies, Part 4 - Highway Traffic Signals, Figure 4C-3

Appendix E – Redwood City Safe Routes to School Report-John Gill Elementary School Excerpts



Redwood City
Safe Routes to School Report

August 2013

PREPARED BY:
Alta Planning + Design

Redwood City

Safe Routes to School Report

Prepared for:

City of Redwood City

Redwood City 2020

Redwood City School District

Prepared by:

Alta Planning and Design

In Partnership with:

Parisi Transportation Consulting

Jungle Communications

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1. Introduction

The City of Redwood City, County of San Mateo, Redwood City School District, and Redwood City 2020 all encourage safe access and active transportation to school. The purpose of this report is twofold:

- To identify potential infrastructure projects and education and encouragement programs that could improve student safety and support walking and biking to school.
- To identify and promote suggested walking and biking routes for students and parents to and from school.

The Redwood City School District (RCSD) has been supported by Redwood City 2020 in the initiation and implementation of a Safe Routes to School (SRTS) program since the middle of the 2009-10 school year. Since the inception of the program, the effort has grown to include 10 of the 16 District schools. SRTS strategies have been customized to meet the needs of each school with the basic foundation of increasing students walking and cycling safely to school. Programs include walking school buses, establishing parking areas near school that permits students to walk from the parking to the school in cases where walking is too difficult and educational programming for parents and students. Additionally, the City of Redwood City in collaboration with RWC 2020 has successfully competed for an estimated $2.0 million in SRTS infrastructure and non-infrastructure grants to support the program.

An overall goal for the District SRTS program is to promote safety, wellness, school community building and reduction in environmental impacts of vehicular student transportation.

This report presents recommendations to improve bicyclist & pedestrian safety and access to six schools in the Redwood City School District:

- Adelante Spanish Immersion School
- Fair Oaks Community School
- Hawes Community School
- John Gill Elementary School
- Roosevelt School
- Roy Cloud School

School site walking audits were conducted at each school either during the morning drop-off or afternoon pick-up periods. Audit teams included Alta Planning + Design staff, City or County staff, school principals, Redwood City 2020, and parents. Each visit began with a discussion of current challenge areas and what types of issues observers should pay attention to. The team then observed student access and reviewed the area near each school for quality of sidewalks, curb ramps, signage, as well as other engineering elements and behaviors of pedestrians, bicyclists, and drivers. Based on the observations and input provided by school staff and parents, the project team developed a report of potential recommendations which are presented for each school in a narrative and graphical format.

5. John Gill Elementary Recommendations

5.1. School Information

Principal: Josh Griffith

Enrollment: 484 Students, K-5

Arrival: All Grades – 8:20 AM

Dismissal: Kindergarten – 11:40 AM
Grades 1-5 – 2:40 PM
Minimum Days – 1:30 PM



John Gill Elementary School

5.1.1. Layout

John Gill Elementary is located on a hillside in central Redwood City. The school looks down the hillside onto Jefferson Avenue, an arterial east/west roadway through Redwood City. The school also has frontage along Avenida Del Ora to the west and Myrtle Street to the east. To the north, the school is fronted by homes on either Harrison Avenue or Eagle Hill Terrace.

Students can access the school grounds via Avenida Del Ora and Myrtle Street.

5.1.2. Loading Zones

There are two on-street loading zones for John Gill Elementary, on Avenida Del Ora and on Myrtle Street.

Avenida Del Ora has two pull-out bays for loading. One of those bays is designated for student buses only. Teachers and yard duty staff monitor both of these loading bays. Avenida Del Ora also has access to two parking lots; the lower lot is used for student loading while the upper lot is reserved for staff.

Myrtle Street has curbside loading that is monitored by staff. This curb has signs indication times for loading-only.

5.1.3. Crossing Guard Location

There is one school staffer crossing guard, stationed at the intersection of South Place at Avenida Del Ora. There are crossing guards on Jefferson Avenue at Cleveland Street to the northeast.

5.1.4. Existing Programs

John Gill Elementary has a "Bi-Monthly Pedi-Pledge Program" where families pledge to walk a certain number of times every month. Students who fulfill their pledge are entered in a raffle to win a small prize. The average participation is around 140 students. During the 2011-2012 school year, five walking school buses operated at John Gill Elementary. All walking school buses, however, did not continue in the 2012-2013 school year due to the parent champions moving their children to other schools.

Students received four bicycle and pedestrian safety assemblies over the previous school year.

5.1.5. Other Improvement Plans

In the spring of 2011, students at Stanford University conducted a walk audit at John Gill Elementary as part of an urban studies course. They developed recommendations primarily for Myrtle Street and its intersection at Jefferson Avenue. Some recommendations, such as erecting "No U-turn" signage on Myrtle and "Right turn only" signage where Myrtle Street meets Jefferson Avenue, were adopted by the City. Other recommendations, such as relocating the adjacent stoplight at Jefferson Street at Hawes Street, were not adopted by the City. The report's recommendations were centered around reducing traffic congestion and improving driver behavior on Myrtle Street during loading periods.

The City has submitted a grant application in the most recent SMCTA Call for Projects to enhance bicycle and pedestrian safety on Hudson Street from Whipple Avenue to Woodside Road. This project will pass to the northeast of the school area for John Gill Elementary. The project will include shared lane markings for bicyclists, signage, and curb extensions in the area of Hawes Community School.

5.2. Issues and Recommendations

5.2.1. Feasibility of Walking, Biking, and Ridesharing to School

The National Center for Safe Routes to School predicts that the majority of students who live within 1.35 miles should be able to walk to and from school, while the majority of students within 2.6 miles should be able to bicycle.[4]

As shown in **Figure 5-1**, just under 30% of students live within half a mile of school and over 80% of students live a mile from school. The overwhelming majority of these students live to the northeast of John Gill Elementary, in areas of Redwood City that are fairly flat. The primary barrier to students walking and bicycling from these neighborhoods to John Gill Elementary is the difficulty of crossing major streets. If major roadways separating John Gill Elementary from these neighborhoods, such as Jefferson Avenue, were more bicycle and pedestrian friendly, it might encourage more students and families to walk and bike to school. John Gill is an excellent candidate for ridesharing programs due to the longer distances families live from school and the density of families who live near each other.

5.2.2. Collisions

Between 2006 and 2011, nine collisions involving youth under age 18 walking or biking were reported near John Gill Elementary School, shown in **Figure 5-2**. Five collisions occurred within a half mile of the school. One of the three bicycle collisions in the area and two of the six pedestrian collisions occurred on Jefferson Avenue.

As with the other schools areas in this report, collisions involving bicyclists and pedestrians near John Gill generally occurred during morning and afternoon school commute hours. Three of the 9 collisions were recorded between 7:30am and 8:00am; the six other collisions were recorded in the afternoon and early evening hours between 2:00pm and 7:00pm. All collisions occurred on weekdays.

[4] This is based on the finding that people are generally willing to travel about 30 minutes each way, regardless of travel mode. Assuming a student walking speed of 2.7 miles per hour and a bicycling speed of 8 mph, a child can travel 1.35 miles by foot or 4 miles via bicycle in 30 minutes. However, accounting for stop light interruptions, hilly terrain, and other factors, the National Center recommends a student bicycling distance target of 2.6 miles. http://www.saferoutesinfo.org/program-tools/what-distances-are-reasonable-expect-elementary-school-students-bike-school

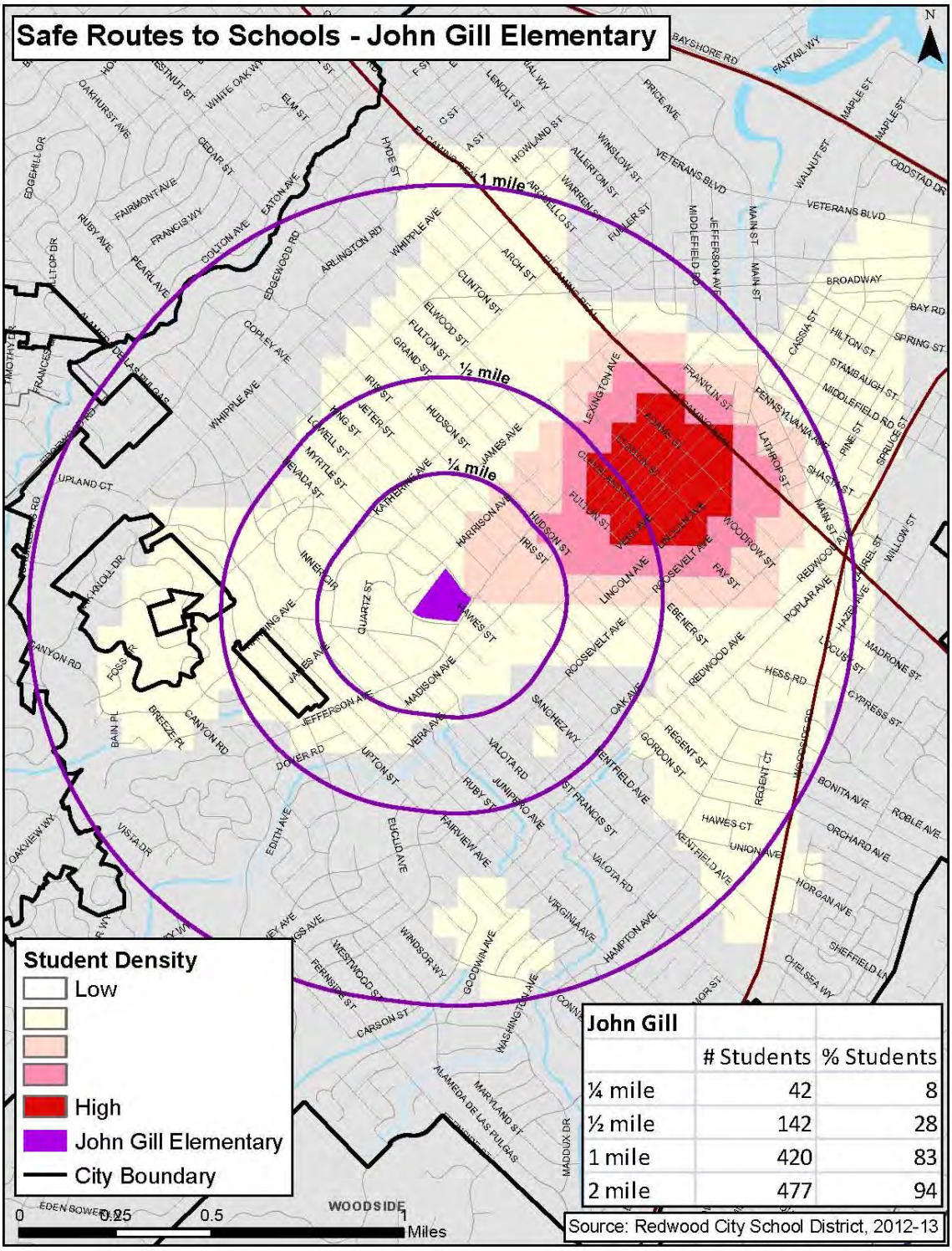


Figure 5-1: John Gill Elementary Enrollment Map

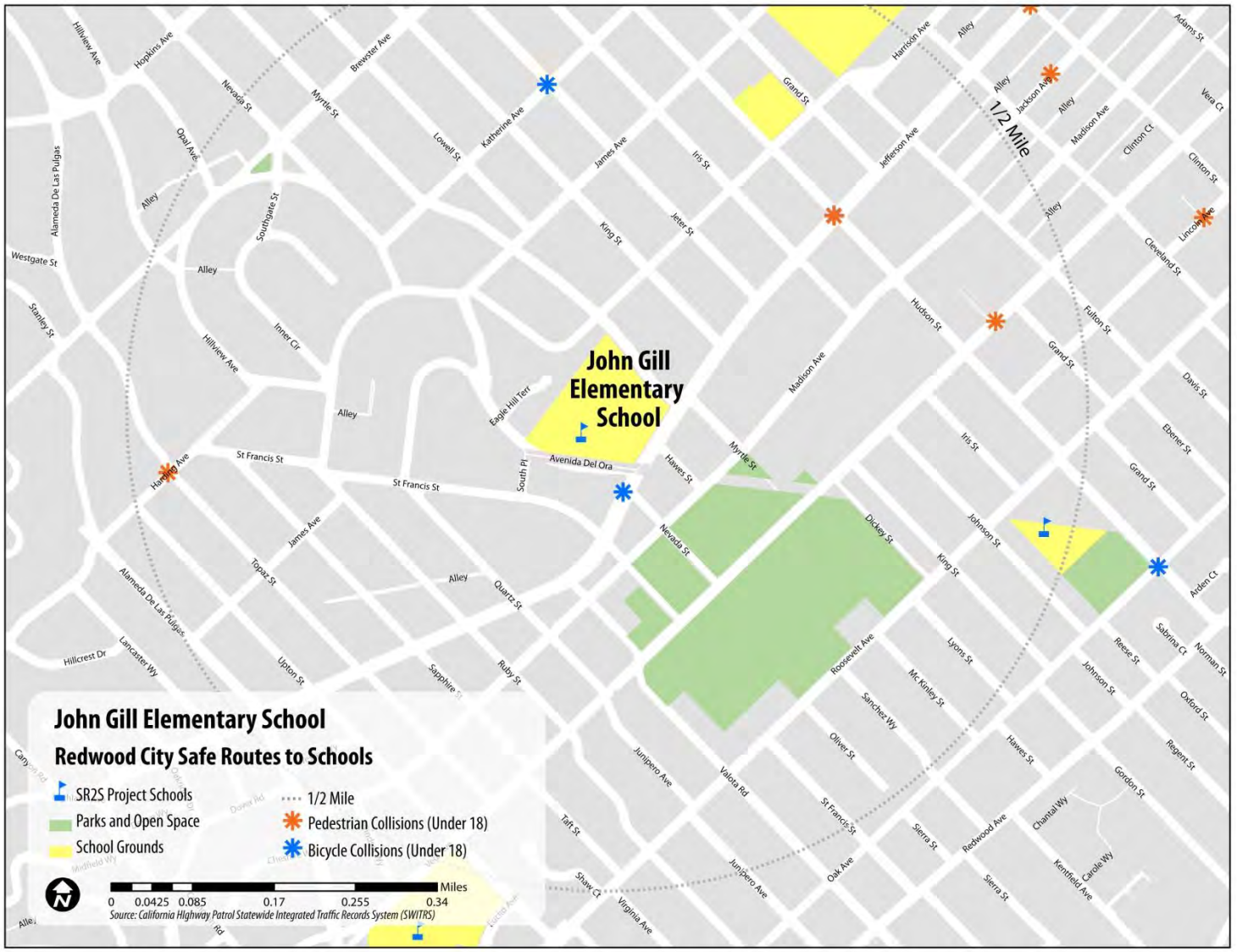


Figure 5-2: John Gill Area Youth Involved Pedestrian and Bicycle Collisions, 2006-2011

5.2.3. Potential engineering Improvements

Potential engineering recommendations are shown and mapped in **Figure 5-3**. Improvement identification numbers reference numbers on the figure.

Avenida Del Ora Loading Zone

The on-street loading zones on Avenida Del Ora are currently overseen by teachers and yard duty staff. There are two pull-outs used for loading, separated by landscaped curb extensions. The loading zone closer to South Place is used for bus loading. During the walk audit, participants observed drivers parking in the bus loading area. Drivers were also observed making U-turns on Avenida Del Ora after dropping off students.

Recommendations (ID #1)

- Recruit student and parent volunteers to assist teachers in loading zones.
- Consider installing "No U-Turn" signage on Avenida Del Ora.

Jefferson Avenue

Jefferson Avenue is a four-lane arterial roadway through Redwood City. The current roadway configuration is not conducive to walking and bicycling: no dedicated bicycle infrastructure, high driver speeds, narrow sidewalks, and few controlled street crossings for pedestrians. Stretches of Jefferson Avenue have no street parking, placing 30 mph traffic directly adjacent to pedestrians on narrow sidewalks.

Where Jefferson Avenue fronts the school grounds, the sidewalks are narrow (approximately 5-6 feet wide), with no street parking to buffer pedestrians from moving traffic. Dirt from the hillside spills out onto the sidewalk, further diminishing the usable pedestrian space.

The intersection of Jefferson Avenue at Hawes Street is signalized, with yellow transverse crosswalks in the southern and eastern legs. There is a small pedestrian island in the center of Jefferson Avenue with a pedestrian-phase push button, but the island is not wide enough to meet current standards for pedestrian islands. The wide curb radii at this intersection leave little space at which to wait before using the crosswalk.

The intersection of Jefferson Avenue at St. Francis Street is uncontrolled and has two high-visibility yellow crosswalks across Jefferson Street and a yellow transverse crosswalk in the northern leg of the intersection.

Recommendations (ID #2, #3, #4 & #5)

- Consider a road diet project on Jefferson Avenue to reduce the number of travel lanes and provide bike lanes on Jefferson Avenue. Additional traffic, engineering, and feasibility studies will be needed for such a project. Design considerations must take into account existing raised and landscaped medians. A road diet in this location could improve comfort and safety for bicyclists by providing dedicated on-street facilities and for pedestrians by reducing the number lanes pedestrians must cross. Where feasible, consider sidewalk widening as part of a road diet project.
- Consider widening the sidewalk along the northern side of Jefferson Avenue between Myrtle Street and Avenida Del Ora. Study whether travel lanes can be narrowed, or if the project can be incorporated into the proposed road diet, before considering cutting into the hillside to accommodate wider sidewalks.
- Upgrade the existing yellow transverse crosswalks at Jefferson Avenue at Hawes Street to high-visibility. Stripe advance stop bars for traffic on Jefferson Avenue at this intersection.

- Consider constructing a curb extension in the eastern corner of the intersection to reduce crossing distance on Jefferson and improve pedestrian visibility. Ensure the curb extension does not interfere with storm drain on Hawes Street.
- Consider expanding the existing median to meet current standards, including protective curbing on both sides of the crosswalk; ensure that construction works in tandem with the potential road diet on Jefferson Avenue.
- Ensure vegetation on Jefferson Avenue is trimmed back from the sidewalk to maximize pedestrian space and ensure visibility.
- Consider additional treatments to improve driver yield rates at the crosswalks across Jefferson Avenue at St. Francis Street, such as advance yield pavement markings, a rapid rectangular flashing beacon (RRFB), pedestrian refuge islands, or in-pavement yield paddles.
- Ensure all curb ramps are ADA compliant at crosswalks on Jefferson Avenue at St. Francis Street, Avenida Del Ora, Hawes Street, Myrtle Street, and King Street. Develop a prioritization matrix for curb ramp construction that gives added weight to established and identified walking routes to schools.

Avenida Del Ora

Participants observed drivers on Avenida Del Ora traveling at high speeds. This was especially the case for drivers coming downhill on Quartz Street and eastbound on Avenida Del Ora towards Jefferson Avenue. There is a landscaped triangle where the two streets meet; downhill traffic on Quartz Street merges into Avenida Del Ora at an oblique angle on the south side of the landscaped triangle, allowing high-speed turns. There is a perpendicular intersection on the north end of the landscaped triangle that can accommodate traffic moving in all directions, making the oblique merge on the southern side of the triangle unecessary. There are two driveways that access the street via this angled merge area.

Recommendations (ID #6)

- Consider closing the angled merge on Quartz Street to traffic, either by extending the landscaped triangle or with bollards and pavement striping. Convert part of this angled merge into a cul-de-sac to maintain access for the two adjacent homes. Route all traffic to the perpendicular intersection on the north side of the landscaped triangle.
- Evaluate installing a stop sign and striping a stop bar for traffic on Quartz Street.
- This improvement requires study of traffic and emergency vehicle access impacts.
- Consider a three-way stop sign at the intersection of Avenida Del Ora at South Place; if infeasible, update existing Assembly D & A signage in all directions.

Hetch-Hetchy Right-of-Way

The path of the Hetch-Hetch aqueduct travels right by John Gill Elementary, with an uninterrupted strip of open space from South Place in the east to Harding Avenue in the west. As the easement for this right-of-way does not allow building construction, this could be an opportunity to construct a Class I pathway, providing access to students living west of John Gill Elementary. Similar Class I pathways have been built along the Hetch-Hetchy right-of-way in Mountain View.

Recommendations (ID #7)

- Consider working with the SF Water Department to construct a Class I pathway from South Place to Harding Avenue, with high-visibility crosswalks, ADA compliant curb ramps, and appropriate crossing signage at each cross-street.

Bicycle Parking

Standard bicycle parking is located nearby the gate to Myrtle Street. The principal expressed interest in bicycle parking for students approaching on Avenida Del Ora.

Recommendations (ID #8)

- Install updated bicycle parking on the southwest side of school grounds.

James Avenue at Grand Street

Parents identified a need for a crosswalk in the southern leg of this intersection.

Recommendation (ID #9)

- Stripe a yellow transverse crosswalk in the southern leg of the intersection (within 600' of MIT school).

Jefferson Avenue at Cleveland Street

Parents identified this uncontrolled crosswalk as a key area of concern. The crosswalk is high-visibility yellow in the western leg of the intersection, with accompanying signage and pavement markings. The crosswalk has a crossing guard.

Recommendation (ID #10)

- Evaluate the intersection for improved crossing enhancements. This may include a signal warrant for the intersection, or enhancements for the uncontrolled crosswalk such as RRFBs or a pedestrian median refuge island.

Engineering Improvement Summary

Table 5-1 lists the recommended improvements to address circulation issues around John Gill Elementary and **Figure 5-3** presents an improvement plan of these recommendations. The project IDs in **Table** 5-1 corresponds to those in **Figure 5-3**. The table shows the identified concerns, the proposed improvement, the agency likely to lead project implementation and the recommended priority level for implementation. The "lead agency" is determined by on whose property/right-of-way the proposed improvement is located. The priority level is based on the anticipated safety and circulation benefit, the feasibility of implementation, and the projected cost.

Table 5-1: John Gill Elementary Recommended Improvements

ID	Location	Issues Observed	Recommendations	Lead Agency	Priority Level
1	Avenida Del Ora Loading Zone	• U-turns on Avenida Del Ora • Poor driver behavior at loading zones	• Recruit student and parent volunteers to act as loading zone valets. Outfit valets with reflective vests. • Consider installing "No U-turn" signage on Avenida Del Ora.	District, City	Medium
2	Jefferson Avenue	• No on-street bicycling facilities • Narrow sidewalks • Difficult pedestrian crossings • High driver speeds	• Consider a road diet project for Jefferson Avenue to provide dedicated on-street facilities for bicyclists, improve the pedestrian experience on the street, and improve conditions for crossing pedestrians. Requires additional traffic, engineering, and feasibility studies, especially in locations with existing raised and/or landscaped medians. • Prioritize ADA compliant curb ramps at Myrtle Street, Avenida Del Ora, St. Francis Street and King Street. • Ensure vegetation is trimmed back from sidewalk on Jefferson Avenue to maximize pedestrian space.	City	High
3	Jefferson Avenue Sidewalk	• Narrow sidewalk with no buffer from vehicle traffic	• Consider widening sidewalk along the northwest side of Jefferson Avenue, from Myrtle Street to Avenida Del Ora. Attempt to incorporate into potential road diet project. Do not expand into hillside where utility boxes and utility poles preclude construction.	City	Medium
4	Jefferson Avenue at Hawes Street	• Faded crosswalk • Pedestrian refuge island is too narrow to meet current standards • Wide curb radii	• Upgrade yellow transverse crosswalks to high-visibility. Ensure all curb ramps are ADA compliant. • Stripe advance stop bars for traffic on Jefferson Avenue. • Consider constructing a curb extension in the southeastern corner. Curb extension cannot obstruct storm drain on Hawes Street. • Consider expanding existing median to a standard pedestrian refuge, including curbing on both sides of the crosswalk.	City	High

ID	Location	Issues Observed	Recommendations	Lead Agency	Priority Level
5	Jefferson Avenue at St Francis Street	• Existing high-visibility crossing could use additional treatments	• Consider treatments to improve driver yield rates for pedestrians crossing Jefferson Avenue, such as advance yield pavement markings, rapid rectangular flashing beacons (RRFBs), pedestrian refuge islands, or in-pavement yield paddles.	City	Medium
6	Avenida Del Ora	• High driver speeds on Avenida Del Ora from drivers exiting Quartz Street • Angled merge at landscaped triangle facilitates high driving speeds. • High driver speeds headed towards Jefferson Avenue.	• Consider closing southern outlet of Quartz Street to traffic, routing all traffic through the perpendicular intersection on Avenida Del Ora. Maintain driveway access to homes south of the outlet closure via a cul-de-sac accessed from Avenida Del Ora. • Evaluate a stop sign at intersection for traffic on Quartz Street. • Study impacts to traffic and emergency vehicle access. • Consider 3-way stop sign at Avenida Del Ora at South Place; if infeasible update Assembly D & A signage.	City	Medium
7	Hetch-Hetchy Right-of-Way	• Right of way would make excellent pathway for students living to the west of the school	• Consider constructing a Class I shared use pathway along the Hetch-Hetchy right-of-way, from Avenida Del Ora in the east to Harding Avenue in the west. • Consider installing high-visibility crosswalks with appropriate crossing signage at each cross street.	City, SF Dept of Water	Medium
8	Additional Bicycle Parking	• Bicycle parking is only available at Myrtle Street gate.	• Install additional bicycle parking on the west side of the school.	District	Low
9	James Avenue at Grand Street	• Regular walking route missing crosswalk in southern leg	• Stripe yellow transverse crosswalk in southern leg	City	Low
10	Jefferson Avenue at Cleveland Street	• Uncontrolled high visibility crosswalk used by many students from many schools in the area.	• Evaluate crossing enhancements, such as a signal warrant, median pedestrian refuge island, or RRFBs	City	High

5.3. Recommended Programs

The five "E's" of Safe Routes to School planning includes:

- Engineering
- Education
- Encouragement
- Enforcement
- Evaluation

The potential infrastructure improvements presented on the previous pages address the recommended engineering improvements. The other four "E's" are related to programs. Programs will complement engineering improvements such as sidewalk and crosswalk improvements by giving students and parents the tools they need to safely and confidently get to school. All of the Five E's work together to enhance the school commute. The following section presents recommended programs to support safer school access.

The recommended programs were developed based on review of existing programs and community identified need.

Student Education Workshops

Student education programs are an essential component of a Safe Routes to School effort. Students are taught traffic safety skills that help them understand basic traffic laws and safety rules. Example pedestrian education curriculum elements include traffic sign identification and how to use a crosswalk. Typical bicycle education curriculum elements include helmet and bike fit, hand signals, and riding safely with traffic.

John Gill Elementary has conducted four bicycle and pedestrian safety assemblies with students in the previous school year.

Recommendation: It is recommended John Gill not only continue to host student education workshops, but also to increase the number of workshops provided each school year. While most families walk to school, a bicycle education component should be added to the curriculum. Bicycle education lessons will benefits the students beyond their commute to school and teach them valuable bicycle traffic safety skills. The education workshops should occur on an annual basis.

Parent Education Workshops

Parent education programs are also an essential component of a Safe Routes to School effort by helping parents lead by good example. Parents are taught key traffic safety skills they can practice with their children anytime they walk or bicycle as a family. Example parent education curriculum elements include basic pedestrian safety skills such as "look left, right, left," obeying to crossing guards, bicycle hand signals, and riding safely with traffic. The curriculum may also include safe driving behaviors, which is especially important in school zones.

There were no parent workshops conducted in the past school year at John Gill Elementary.

Recommendation: It is recommended a parent traffic safety education workshop be held on an annual basis. The workshops should cover safe driving, walking, and bicycling behaviors.

Monthly Pedi-Pledge Program

Students pledge to walk to school a number of times a month. The program includes incentives.

Recommendation: Continue the Monthly Pedi-Pledge Program.

Park-and-Walk

A Park-and-Walk program can reduce traffic congestion at the school and encouraging student physical activity.

Recommendation: It is recommended that the school develop a Park-and-Walk program with maps of recommended parking areas that are posted on the school website. The maps should be distributed in back to school packets and be available in the school office. School newsletters or related school news should remind parents of this program. A potential park-and-walk site is the Red Morton Community Park to the southeast.

Walking School Bus

While a walking school bus program was implemented but discontinued due to loss of parent champions, this program can help with traffic congestion around the school, help develop healthy habits, and build community.

Recommendation: It is recommended John Gill reinstate a Walking School Bus program. The program may be organized through outreach including tabling, meet and greet sessions, and through school communications. Meet and greet sessions may bring parents together and instill a sense of comfort with parents leading the Walking School Bus.

Monthly Walk to School Day Events

Monthly Walk to School Day events help advertise walking to school and related programs such as Park-and-Walk, Walking School Buses and the Pedi-Pledge Program.

The school currently hosts monthly Walk to School Day events with student incentives.

Recommendation: It is recommended the school continue the monthly Walk to School Day events. Outreach should include notices in the school newsletter or related school news to remind parents of this monthly event. Outreach should include advertisement of the Suggested Routes to School maps a week before each Walk to School Day event.

SchoolPool – CarPool

Carpooling complements walking and biking modes by reducing vehicle congestion and increasing pedestrian and bicyclist safety at schools, and by providing a greener transportation alternative for families who live further away from school, as many John Gill families do. There is a high concentration of families living between one-half and one mile from school to the east near El Camino Real. Families in this area are ideal candidates for a carpool program.

Recommendation: It is recommended John Gill participate in an online carpooling tool,, work with the parent community to promote informal off-line carpooling, and host a Car Pool to School day early in the school year. Outreach for the online tool and the event can include tabling during school arrival and dismissal and meet and greet sessions. Examples of such websites are at (www.carpoolassist.com) and (www.carpooltoschool.com). Carpool outreach should also consider parents without internet access.

A Car Pool to School Day event toolkit is available through Redwood City 2020.

Crossing Guards

The effectiveness of a crossing guard can be the deciding factor in a parent feeling comfortable enough to let their child walk or bike to school.

Recommendation: Provide standardized, district-wide crossing guard training according to best practices.

Trash Collection

Parents expressed concern about students bicycling to school on route where trash collection occurs in the morning.

Recommendation: The City should work with their waste management contractor to minimize trash collection during before-school and after-school hours on identified walking and biking routes to schools. The City should use the suggested walking route maps to help identify key routes and streets for consideration.



John Gill Elementary Safe Routes to School Improvement Plan

1 John Gill Elementary Loading Zones
- Recruit student and parent volunteers to assist teachers in loading zones.
- Consider installing "No U-Turn" signage on Avenida Del Ora.

2 Jefferson Avenue Road Diet
- Consider a road diet project for Jefferson Avenue. Requires additional traffic, engineering, and feasibility studies, especially in locations with existing raised and/or landscaped medians.
- Prioritize ADA compliant curb ramps on Jefferson Street at Myrtle Street, Avenida Del Ora, St Francis Street & King Street.

3 Jefferson Avenue Sidewalk
- Consider widening the sidewalk along Jefferson Avenue, from Myrtle Street to Avenida Del Ora. Attempt to incorporate into proposed road diet project. Do not expand into hillside where utility boxes and utility poles preclude construction.

4 Jefferson Avenue at Hawes Street
- Upgrade yellow transverse crosswalks to high-visibility. Ensure all curb ramps are ADA compliant.
- Stripe advance stop bars for traffic on Jefferson Avenue.
- Consider constructing curb extension in eastern corner to reduce curb radius and reduce crossing distance on Jefferson. Curb extension cannot obstruct storm drain on Hawes Street.
- Consider expanding the existing median to a standard pedestrian refuge, including curbing on both sides of the crosswalk.

5 Jefferson Avenue at St. Francis Street
- Consider treatments to improve driver yield rates for pedestrians crossing Jefferson Avenue, such as advance yield pavement markings, rapid rectangular flashing beacons (RRFBs), pedestrian refuge islands, or in-pavement yield paddles.

6 Avenida Del Ora
- Consider closing the southern outlet of Quartz Street to traffic, routing all traffic through the perpendicular intersection on Avenida Del Ora. Maintain driveway access to homes south of the outlet closure via a cul-de-sac accessed from Avenida Del Ora.
- Evaluate a stop sign at intersection for traffic on Quartz Street.
- Consider 3-way stop at Avenida Del Ora at South Place; if not feasible, upgrade outdated Assembly D & A signage.

7 Hetch-Hetchy Right-of-Way
- Consider constructing a Class I shared use pathway along the Hetch-Hetchy right-of-way, from Avenida Del Ora to Harding Avenue.
- Consider installing high-visibility crosswalks with appropriate crossing signage at each cross street.

8 Additional Bicycle Parking
- Install additional bicycle parking on the west side of the school.

9 James Avenue at Grand Street
- Stripe a yellow transverse crosswalk in the southern leg.

10 Jefferson Avenue at Cleveland Street
- Evaluate for improved crossing enhancements, including signal warrant, median refuge island, or RRFBs.

Figure 5-3: John Gill Elementary Improvement Plan

8. Citywide Collision Analysis

Between January 2006 and December 2011, there were 58 reported pedestrian collisions in San Mateo County involving youth under the age of 18. 40 percent of pedestrian collisions occurred in a marked crosswalk at an intersection. Slightly more (43 percent) occurred as the pedestrian crossed the street not using a marked crosswalk. Ten percent of all pedestrian collisions in this period were severe. Pedestrians sustained visible injuries in 52 percent of collisions.

In the same time period, there were 41 recorded collisions involving bicyclists. Automobile right of way was deemed the primary collision factor in 32 percent of crashes; riding on the wrong side of the road was the primary collision factor in 27 percent. Five percent of injuries reported were severe, while 42 percent of those reported were other visible injuries. The remaining 54 percent were the least severe category of injury – complaint of pain.

Of the 99 collisions involving bicyclists and pedestrians, 23 occurred between 7:15 and 8:30am. Twenty-five collisions occurred between 2:00pm and 5:00pm.

The months with the most bicycle and pedestrian crashes among youth under age 18 were November, September, October, and March. Weekdays accounted for 83 percent of all crashes. The vast majority of crashes (77 percent) occurred in the daylight; of the crashes occurring at dusk or at night, 16 percent occurred at night on streets with street lights.

Of all the primary roadways where vehicular crashes involving pedestrians and bicycles were reported, El Camino Real was the most common roadway with 12 percent of all crashes. Woodside Road and Hudson Street were the next most common streets, at 8 percent and 4 percent respectively.

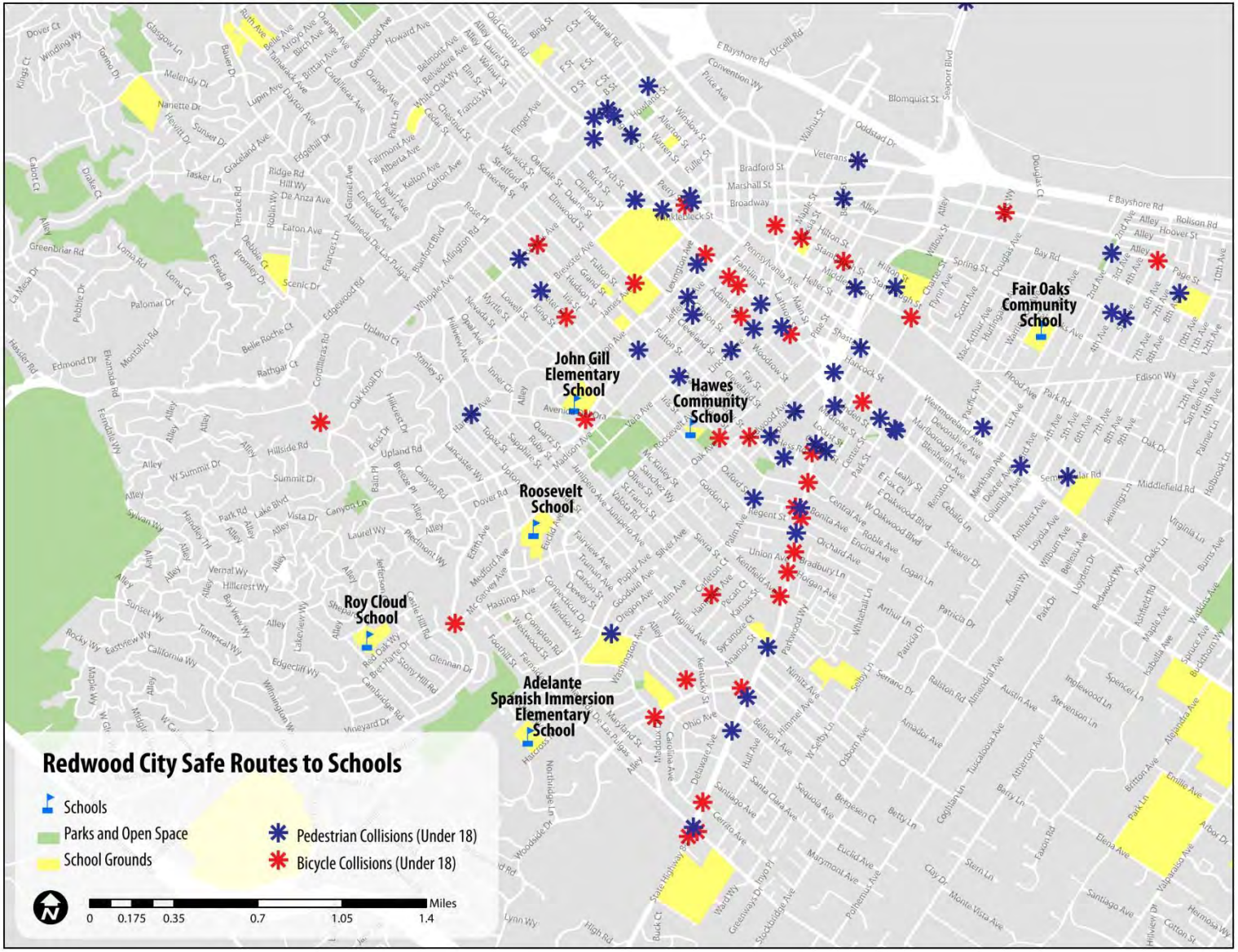


Figure 8-1: Citywide Youth Involved Pedestrian and Bicycle Collisions, 2006-2011

Appendix A - Example Engineering Devices

Design of the physical environment around schools are integral to a comprehensive Safe Routes to School Program that ensures walking, biking, and other "green" forms of travel are easy and safe. The engineering improvements presented in this report follow the standards set forth by the California Department of Transportation (Caltrans). Most of the proposed signage and striping improvements are relatively simple and cost effective to install when compared to more intensive engineering devices, such as curb extensions and paths.

In accordance with Caltrans and industry standard terms, "shall" "should" or "may" are used to denote when to install the example engineering devices. *Shall* is used when an improvement is required to be installed under pre-defined conditions. *May* is used when an improvement installation is optional under pre-defined conditions. *Should* is used when an improvement supports the effectiveness of required improvements.

A-1: Signage

School related signage warns motorists of a school zone or crosswalk and regulates their movements to ensure the safest conditions possible for pedestrians and bicyclists.

Warning Signs

Assembly A



May be installed up to 500 feet in advance of a school.

Assembly B



Shall be installed at an uncontrolled crosswalk (no stop sign).

Assembly D



Shall be installed 100 feet in advance of an uncontrolled crosswalk.

In-Pavement Yield Paddle



May be installed in an uncontrolled crosswalk

Regulatory Signs

No Turn



No Right and Left Turn signs are typically used to improve circulation and reduce queue lengths.

No U-Turn



No U-Turn signs are typically used to reduce conflicts with pedestrians and motorists.

Loading Zone



Loading zones designate a pick up/drop off location and may include a plaque allowing parking during off-loading times.

School Speed Limit



May be installed up to 500 feet in advance of a school and is installed with a time sensitive flashing beacon. Engineers determine the posted speed.

A-2: Striping

School related striping includes crosswalks and curb colors. Bicycle lane striping and markings can be also considered school related. Bicycle-related striping improvements are only recommended in this report where they align with the Hudson Street bike/ped grant submitted by the City. Thermoplastic is recommended for striping improvements.

Curb Colors

School Loading Zone curbs are white.

Freight/Bus Loading Zone curbs are yellow.

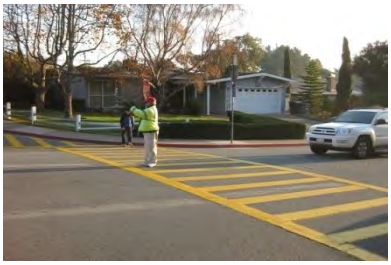
Accessible curbside parking curbs are blue.

No Parking Zone curbs are red.

Crosswalks

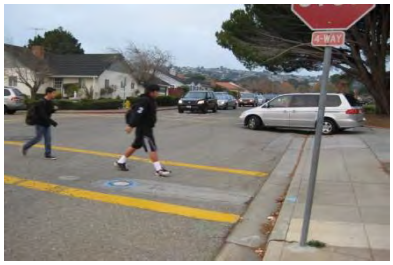
Crosswalks connect one corner of a street to the opposite side and do not have to be marked with paint or thermoplastic unless where no corner exists (mid-block crosswalk). In California, yellow crosswalks can be used on roadways where students frequently cross. Caltrans standard is for all crosswalks contiguous to schools to be yellow. Crosswalk may also be yellow if within 600 feet of a school or school grounds. White crosswalks are used in all other areas.

High Visibility Crosswalk



High visibility crosswalks have longitudinal and latitudinal lines.

Transverse Crosswalk



Transverse crosswalks have latitudinal lines.

Lighted Crosswalk



Pedestrian activated lights may be installed on a sign and/or in the pavement.

A-3: Curb Extensions

There are a range of devices that work to reduce motorist speeds. This report recommends curb extensions in many locations, most of which are skewed intersections (where streets do not intersect at 90 degree angles). Curb extensions are recommended where the radius of a corner could be increased to reduce the speed of turning vehicles, discourage U-turns, and/or reduce crosswalk distance.

Curb Extension



Curb extensions reduce the width of a roadway.