DRAFT INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION FOR EXPANSION OF A WELL FIELD AT HELENDALE ROAD AND SHADOW MOUNTAIN ROAD, HELENDALE, CA

Lead Agency/Applicant:
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Section 1.0 Introduction

1.1 Purpose of this Initial Study

This Initial Study analyzes the environmental impacts associated with the expansion of an existing well field to include the construction of multiple new wells (replacement and new) and appurtenant facilities for the community within the boundary of the Helendale Community Services District (HCSD – Exhibit 6.1.3), located on approximately 43.08+/-acres. The project is located both south and east of the intersection of Helendale Road and Shadow Mountain Road.

The HCSD is an independent entity created under California state law to provide services within unincorporated county areas. The HCSD provides water, parks and recreation, solid waste and recycling, wastewater, street lighting, and graffiti abatement services. The HCSD provides this water service pursuant to the regulatory jurisdiction of the State Water Resources Control Board, Division of Drinking Water (DDW), and is required to obtain well drilling permits and encroachment permits from the County of San Bernardino. HCSD operates its potable water system under the terms and conditions of a Water Supply Permit issued by the DDW.

The proposed new water supply wells will be pumped to supplement HCSD's existing sources. Before the new wells can be connected to the HCSD water supply system, it must obtain an amended permit from the DDW to add new facilities to its system. As the lead agency, HCSD must comply with CEQA and make a determination on the potential effects of permitting a replacement and new water supply and modified distribution facilities on the existing environment.

The HCSD is the designated *Lead Agency* and as such, the HCSD will be responsible for the project's environmental review. Section 21067 of California Environmental Quality Act (CEQA) defines a Lead Agency as the public agency that has the principal responsibility for carrying out or approving a project that may have a significant effect on the environment¹. As part of the proposed project's environmental review, the HCSD has authorized the preparation of this Initial Study². The primary purpose of CEQA is to ensure that decision-makers and the public understand the environmental implications of a specific action or project. An additional purpose of this Initial Study is to ascertain whether the proposed project will have the potential for significant adverse impacts on the environment once it is implemented. Pursuant to the CEQA Guidelines, additional purposes of this Initial Study include the following:

- To provide the HCSD with information to use as the basis for deciding whether to prepare an environmental impact report (EIR), mitigated negative declaration, or negative declaration for a project;
- To facilitate the project's environmental assessment early in the design and development of the proposed project;
- To eliminate unnecessary EIRs; and,
- To determine the nature and extent of any impacts associated the proposed project.

Although this Initial Study was prepared with consultant support, the analysis, conclusions, and findings made as part of its preparation fully represent the independent judgment and position of the HCSD, in its capacity as the Lead Agency. The HCSD determined, as part of this Initial Study's preparation, that this Mitigated Negative Declaration is the appropriate environmental document for the proposed project's CEQA review. Certain projects or actions may also require oversight approvals or permits from other public agencies. These other agencies are referred to as *Responsible Agencies* and *Trustee Agencies*, pursuant to Sections 15381 and 15386 of the State CEQA Guidelines³. This Initial Study and the *Notice of Intent to Adopt a Mitigated Negative Declaration* will be forwarded to responsible agencies, trustee agencies, and the public for review and comment. A 30-day public review period will be provided to allow these entities and other interested parties to comment on the proposed project and the findings of this Initial Study⁴.

¹ California, State of. California Public Resources Code. Division 13, Chapter 2.5. Definitions. as Amended 2001. §21067.

² Ibid. (CEQA Guidelines) §15050.

³ California, State of. Public Resources Code Division 13. The California Environmental Quality Act. Chapter 2.5, Section 21067 and Section 21069. 2000.

⁴ California, State of. Public Resources Code Division 13. The California Environmental Quality Act. Chapter 2.6, Section 2109 (b), 2000.

Questions and/or comments should be submitted to the following contact person:

Ginger E. Coleman, Contract Planner Helendale Community Services District c/o Altec Land Planning 19531 Highway 18 Apple Valley, CA 92307 GingerEColeman@gmail.com

1.2 Initial Study's Organization

The following annotated outline summarizes the contents of this Initial Study:

- Section 1 Introduction: provides the procedural context surrounding this Initial Study's preparation and insight into its composition.
- Section 2 Project Description: provides an overview of the existing environment as it relates to the project area and describes the proposed project's physical and operational characteristics.
- Section 3 Environmental Analysis: includes an analysis of potential impacts associated with the construction and the subsequent operation of the proposed project.
- Section 4 Conclusions: summarizes the findings of the analysis. This section also includes the Mitigation Monitoring and Reporting Program (MMRP).
- Section 5 References: identifies the sources used in the preparation of this Initial Study.

INITIAL STUDY ENVIRONMENTAL CHECKLIST FORM

Section 2.0 Project Description

2.1 Project Overview

Project title: Proposed Expansion of an Existing Well Field

Lead agency name and address: Helendale Community Services District

26540 Vista Road (P.O. Box 359)

Helendale, CA 92342

Contact person and phone number: Dr. Kimberly Cox, General Manager, (760) 951-0006.

Project sponsor's name & address: Helendale Community Services District

26540 Vista Road (P.O. Box 359)

Helendale, CA 92342

General plan designation:

Zoning:

Single Residential

RS (Single Residential

Overlays: Biological Resources Overlay

Hazard Overlays – Dam Inundation

2.2 Project Location

The project is generally located south and east of the intersection of Helendale Road and Shadow Mountain Road, in the community of Helendale, CA 92342 (APNs 467-121-22 & 28)

2.3 Environmental Setting

The Site is generally in the Mojave Scrub community and the eastern edge being on the western edge of the Mojave River corridor. It is explicitly noted, on 09/22/2020 California Fish and Game Commission preliminarily designated the western species of the Joshua Tree (Yucca brevifolia) as an Endangered Species (starting a one-year review and analysis by Fish and Game) and this Site has no Joshua Trees and no Joshua Trees existing on immediate adjacent parcels, therefore little potential for future seedling Joshua trees inhabiting the Site in the near future. Portions of the Site are fallow agricultural areas and other remaining area are disturbed desert with off-highway vehicle (OHV) trails and still contain the ubiquitous Creosote (*Larrea tridentata*) and other Mojave Scrub and invasive grass and plant species of Schismus sp., Brome sp., Saharan mustard, Salsola sp.

The Project Site currently contains three (3) water wells, 2 located on the norther parcel, and 1 located on the southern parcel. In addition, 2 water wells are located off-site abutting the site on Helendale Road. See Exhibit 6.1.11 for approximately distances.

Surrounding land uses include the following:

- North: North of the Site is Helendale Road, fallow agricultural land, and the Silver Lakes community.
- East: East of the Site is the Mojave River corridor.
- South: South of the Site is vacant native desert, fallow agricultural land, and the Mojave River.
- West: West of the Site is Helendale Road, fallow agricultural land, and the Silver Lakes community.

2.4 Project Description

To allow for the expansion of an existing well field to replace existing non-producing wells in a designated disadvantaged and severely disadvantaged community to include in the construction of multiple water wells and appurtenant facilities for the community of Helendale on 43.08+/- acres (2 parcels). Primary Access to the site will be provided by the adjacent Helendale Road.

The proposed wells will be equipped with an above ground pump motor on top of an approximate 10-foot by 10-foot concrete pad. No landscaping will be installed at the well sites. The closest connection to the HCSD system is located in the adjacent roadway (Helendale Road).

Each new water well will be drilled using a reverse rotary drill unit to an appropriate depth to achieve a sufficient amount of water for HCSD water supply and planning purposes to serve existing residents and businesses and continued growth. Existing water lines are proposed to be used with the first water well and potential new distribution water lines for additional water wells, as needed in the future.

The new wells will serve to provide the community with a supplemental, reliable source of drinking water, which will be a vital source of water to the community. The wells will each be equipped with an above ground pump motor on top of an approximate 10-foot x 10-foot concrete pad. No new landscaping is proposed to be installed at any of the well sites, which is consistent with the current conditions of the existing wells on the Site and adjacent off-site well sites.

Once the wells are completed to the desired depth, they will be pumped to test the production rate and water quality. The pump-test groundwater extracted from the new well(s) will be distributed into the Mojave River adjacent on the east since no existing "On-Site Water Well Testing" indicates any issues of concern, therefore the existing ground water quality meets Regional Board discharge requirement standards. Assuming the wells produce a sufficient quantity of groundwater of adequate quality, the well(s) will be equipped for production and converted to a production well on a long-term basis for HCSD distribution and capacity purposes.

Below outlines a typical detailed sequence of events implemented in support of the proposed project.

- The bucket auger drill rig will come onsite and drill and install conductor casing and sanitary seal.
- The reverse rotary drill rig will mobilize to the site and set up (no sound wall are proposed).
- Drill the pilot borehole and collect associated data, such as lithology, geophysical logs, and isolated aquifer zone testing to establish potential screening depths.
- Deliver the well construction materials. Drill enlarged borehole to target depth. Construct the well.
- Conduct initial well development by airlift/swab. Demobilize the drill rig and mobilize the test pump. Conduct final development by pumping.
- Conduct pumping tests.
- Temporarily cap the well and demobilize remaining equipment. Return the site to original condition.
- Construct concrete pad and fencing at Well Site and use existing dirt road access.
- Connect water well to new and existing electrical and water lines on the existing site.
- Connect well to HCSD's potable Distribution and Storage Systems, as needed.

Construction Scenario

It is anticipated that a maximum of five full-time persons will be on a well site at any one time to support drilling and completing each well: (i.e. three drillers, the hydrologist inspector, and a foreman or fencing crew). Daily trips to complete the well will average about 10 roundtrips per day, including: two roundtrips for drill rigs; between 6 and 12 roundtrips for cement trucks; a few trips to deliver pipe; and about 10 trips per day for employees. It is estimated that it will require about 5 weeks to drill and complete each well, with 24-hour drilling activities for 7 days a week (there are no adjacent or surrounding housing or businesses to be notified in advance or for sound attenuation). The objective for each well is to generate a maximum amount of high quality and dependable water source for HCSD. Assuming the groundwater amount and quality is potable (see the discussion under Hydrology and Water Quality), the new wells will each be connected to HCSD's

distribution system. At each of the well locations, the closest connection to HCSD's system is within the adjacent Helendale Road . At each well location, a connection pipeline that will be installed will be no greater in length than 500 lineal feet (LF). Each new well pump will be located aboveground. It is noted that HCSD staff and other designated individuals (Certified Wildlife Biologist, Certified Arborist, Project Planner, Project Surveyor, Project Engineer) will visit the Project Site prior to Well Site construction, during construction activities and subsequent to well completion and is anticipated to be no more than on a weekly basis.

Operational Scenario

Operation of each new well would be on an as needed basis in the future and would not require any shifts or employees as it will be monitored and controlled remotely. Each of the new production wells is anticipated to use less than 1.0 million KWH to operate per year (if full time) and it is noted pump efficiency and pump-time management is always improving. A back-up generator may be installed on a concrete pad in support of each production well to ensure that each well has continuous electricity if determined by HCSD. Chemicals used in the water production process will be chlorine (sodium hypochlorite) or other approved disinfection processes.

2.5 Discretionary Actions

Other public agency whose approval and/or review may be required: Issuance of grading and building permits and completion of structures to current building code may be required by the County prior to establishment of any significant development on-site. In addition, confirmation by the California Department of Fish and Wildlife, Caltrans, Lahontan Regional Water Quality Control Board, Mojave Desert Air Quality Management District, Mojave Water Agency, Victor Valley Union High School District, Helendale School District, as well as Southern California Edison, Southwest Gas, Frontier Communications and other utilities may be required.

2.6 Tribal Consultation

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 is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

Tribal consultation has been started. Appropriate mitigation measures will be included, as necessary.

NOTE: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 2108321080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

2.7 Potential Joshua Tree Petition and Evaluation process

On October 15, 2019, the Center for Biological Diversity (CBD) petitioned the California Fish and Game Commission (CFGC) to protect the western Joshua trees (*Yucca brevifolia*) under the California Endangered Species Act (CESA) because the trees are potentially threatened by climate change, fires, and habitat destruction from urban sprawl and other development in the western Mojave Desert. On April 13, 2020, the CFGC reviewed the completed Petition Evaluation and the Department has determined the Petition provides sufficient scientific information to indicate that the petitioned action may be warranted for the western Joshua Tree. Therefore, the Department recommends the CFGC accept the Petition for further consideration under CESA. At that time other local agencies were giving their input to this CESA review process. On 09/22/2020 the CFDC approved the Petition and currently the process is being reviewed by CDFW staff for implementation. No definitive information from CDFW is currently available based upon email correspondence in the last 30 days.

The environmental factors checked below would be potentially affected by this project, involving at least one

Section 3.0 Environmental Analysis

impad	ct that is a "Potentially Signit	ficant	Impact" as indicated by the checklis	t on t	the following pages.	
	Aesthetics		Agriculture and Forestry Resources		Air Quality	
	Biological Resources		Cultural Resources		Energy	
	Geology / Soils		Greenhouse Gas Emissions		Hazards & Hazardous Materials	
	Hydrology / Water Quality		Land Use/ Planning		Mineral Resources	
	Noise		Population / Housing		Public Services	
	Recreation		Transportation		Tribal Cultural Resources	
	Utilities / Service Systems		Wildfire		Mandatory Findings of Significance	
	DETERMINATION: (To be completed by the Lead Agency and/or Consultant) On the basis of this initial evaluation:					
	I find that the proposed projection DECLARATION shall be pre		OULD NOT have a significant effect on I.	the e	environment, and a NEGATIVE	
	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 of the incorporated mitigation measures and revisions of the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION shall be prepared.					
	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.					
	been adequately analyzed in addressed by mitigation mea "potentially significant impact	n an e asure: t" or "	AY have a significant effect(s) on the enterior document pursuant to applicable is based on the earlier analysis as described potentially significant unless mitigated analyze only the effects that remain to be	legal ribed '. An I	standards, and 2) has been on attached sheets, if the effect is ENVIRONMENTAL IMPACT	
	I find that the proposed project WILL NOT have a significant effect on the environment, because no new potentially significant effects have been identified beyond those previously analyzed adequately in an earlier EIR, pursuant to applicable standards, and no additional mitigation measures beyond those imposed as part of that previous EIR are necessary to be imposed upon the proposed project to reduce mitigable impacts to an insignificant level. Therefore, no additional environmental documentation is necessary.					
gu	rige E Coleman			0	ectober 22, 2020	
	Signature: prepared by Ginger E. Coleman, MPA Date					
R	Rasefullolina October 22, 2020					
Sign	ature: prepared by RJ Cole	eman	, AICP, CA, CWB, PE, QSD/P	D	ate	
\prec	Laz Cx			0	ctober 22, 2020	
	Signature: Dr. Kimberly Cox, General Manager Date					

EVALUATION OF ENVIRONMENTAL IMPACTS:

- A brief explanation is provided for all answers except "No Impact" answers that are adequately supported by the information sources the lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer is 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 take 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) "Potentially Significant Impact" is noted if there is substantial evidence that an effect is significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- "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 describes the mitigation measures, and briefly explains how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses", may be cross-referenced.)
- 5) Earlier analyses may be referenced where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on 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.
- The lead agency incorporates into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, includes a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used, or individuals contacted should be cited in the discussion.
- 8) The explanation of each issue should identify:
 - a) The significance criteria or threshold, if any, used to evaluate each question; and
 - b) The mitigation measure identified, if any, to reduce the impact to less than significance.

3.1 Aesthetics

	Issues	Potentially Significant Impact	Less than Significant w/Mitigation Incorporated	Less than Significant	No Impact
	AESTHETICS - Except as provided in Public Resources Code Section 21099, would the project				
a)	Have a substantial adverse effect on a scenic vista? (3; 27)				\boxtimes
b)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? (3)				
c)	Substantially degrade the existing visual character or quality of the site and its surroundings? (1; 27)			\boxtimes	
d)	Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area? (27)			\boxtimes	

AESTHETICS

The proposed project is not located within a Scenic Corridor, as designated by the Scenic Corridor Overlay District of the County of San Bernardino General Plan, or the California Scenic Highway Mapping System. The Site is within the Helendale CSD. The proposed project is the expansion of an existing well field which was historically used for agricultural cultivation. It is consistent with the visual character of the surrounding area (See Table of Surrounding Uses below).

Surrounding Uses

AREA	EXISTING LAND USE
Site	Helendale CSD (proposed owner) and remaining vacant area highly disturbed by AG use.
North	Helendale Road, Fallow Agricultural Land, Silver Lakes Community
South	Native Vacant Desert, fallow agricultural land, and Mojave River
East	Mojave River
West	Helendale Road, Fallow Agricultural Land, Silver Lakes Community

Generally, Joshua trees are another notable aesthetic feature of the greater Victor Valley area. Joshua trees, which can grow up to 12 meters (40 feet) tall, are distributed on gentle slopes and on valley floors of upper bajadas and sandy areas. The Joshua tree (state & locally protected) is an archetypal plant of the Mojave Desert that can live several hundred years; it provides valuable habitat for a variety of native wildlife species.

NOTE: (1) On 10/15/2019, the Center for Biological Diversity (CBD) petitioned the California Fish and Game Commission (CFGC) to protect the western Joshua trees (Yucca brevifolia) under the California Endangered Species Act (CESA) because the trees are potentially threatened by climate change, fires, and habitat destruction from urban sprawl and other development in the Mojave Desert.

NOTE: (2) On 04/13/2020 the CFGC reviewed the completed Petition Evaluation and the Department has determined the Petition provides sufficient scientific information to indicate that the petitioned action may be warranted for the western Joshua tree. Therefore, the Department recommends the CFGC accept the Petition for further consideration under CESA. At this time other local agencies are giving their input to this CESA review process and future CFGC meetings are being schedule [See Exhibit 6.1.13].

NOTE: (3) On 9/22/2020 the California Fish and Game Commission (CFGC) voted to protect the western Joshua trees (Yucca brevifolia) under the California Endangered Species Act (CESA) because the trees are potentially threatened by climate change, fires, and habitat destruction from urban sprawl and other development in the Mojave Desert. [See information and mapping under Exhibit 6.1.13]

Explanations:

- a. **No Impact** The proposed project will have no impact on scenic vistas. Existing use of the site include existing wells and utility lines, and fallow agricultural land dominated with invasive grass and weed species. The proposed project is the expansion of the existing well field to serve the area, which existing improvements is predominantly residential (Silver Lakes), with neighborhood commercial uses, two recreational lakes, a 27-hole golf course, and various other amenities and the remaining boundary of HCSD is mostly vacant native desert lands, scattered homes on acreage, scattered fallow and minor agriculture uses, and the Mojave River riparian corridor and floodplain areas.
- b. **No Impact** The proposed project will not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. No protected trees, rock outcroppings, or historic buildings are located on or in close proximity to the project site, which has been disturbed since at least the early 1950s by agricultural use. The project is not located or within proximity to a scenic highway. No Joshua Trees or Cactus on the vacant portions of Site.
- c. Less Than Significant Impact The proposed project will not substantially degrade the existing visual character of the site and its surroundings. The site includes an existing well field. This project seeks to expand the well field to include additional wells and appurtenant structures. Since this area has been used for agricultural uses since at least the early 1950s til 1970s and fallow since, and the proposed project will not substantially degrade the existing visual character of the site and its surroundings.
- d. **Less Than Significant Impact** The proposed project includes no new lighting in the area.

3.2 Agricultural and Forestry Resources

	Issues	Potentially Significant Impact	Less than Significant w/Mitigation Incorporated	Less than Significant	No Impact
	AGRICULTURE AND FORESTRY 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 Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? (19)				\boxtimes
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract? (1)				\boxtimes
c)	Conflict with existing zoning for, or cause rezoning of forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined in Public Resources Code section 4526) or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? (1)				\boxtimes

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d)	Result in the loss of forest land or conversion of for (1; 4)	est land to non-forest use?				\boxtimes
e)	Involve other changes in the existing environment, or nature, could result in conversion of Farmland, to 4: 19)		П	П	П	\bowtie

AGRICULTURE

The FMMP is a non-regulatory program that produces Important Farmland maps and statistical data. The FMMP groups land into one of five categories (Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, and Grazing Land), with agricultural land being rated according to soil quality and irrigation status. The site is not listed as Prime Farmland, Unique Farmland or Farmland or Statewide Importance as 2018.

FORESTY RESOURCES

Plant communities within the Helendale area include creosote bush scrub, Mojave Desert saltbush scrub, rabbitbrush scrub, ruderal (disturbed) communities, Joshua tree woodland, and riparian communities within the Mojave River and its floodplain, which includes transmontane alkali and freshwater marsh, Mojave riparian forest, and southern willow scrub. There is no significant forestland or timberland in the project area.

Explanations:

No Impact - The site is not listed as Prime Farmland, Unique Farmland or Farmland of Statewide а.-е. Importance. Additionally, the site and all surrounding properties are within an urbanized area, and no forest land or farmland is located in the vicinity that may be affected by the development of this project.

3.3 **Air Quality**

	Issues	Potentially Significant Impact	Less than Significant w/Mitigation Incorporated	Less than Significant	No Impact
	AIR QUALITY - Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a)	Conflict with or obstruct implementation of the applicable air quality plan? (1; 2; 3; 21; 27)			\boxtimes	
b)	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? (3; 10; 21; 27)			\boxtimes	
c)	Expose sensitive receptors to substantial pollutant concentrations? (4; 11)			\boxtimes	
d)	Result in other emissions (such as those leading to odors or dust) adversely affecting a substantial number of people? (4)				

AIR QUALITY

The project area is located in southwestern San Bernardino County, in the geographic subregion of the southwestern Mojave Desert known as the Victor Valley and commonly referred to as the "High Desert" due to its approximate elevation of 2,900 feet above sea level. Hot summers, mild winters, infrequent rainfall, moderate afternoon breezes, and generally fair weather characterize the climate of the Victor Valley, an interior sub-climate of Southern California's Mediterranean climate. The clouds and fog that form along the Southern California coastline rarely extend across the mountains to Helendale. The most important local weather pattern is associated with the funneling of the daily onshore sea breeze through Cajon Pass into the upper desert to the northeast of the heavily developed portions of the Los Angeles Basin. This daily airflow brings polluted air into the area late in the afternoon from late spring to early fall. This polluted air transport pattern both creates unhealthful air quality and inhibits the scenic vistas of the mountains surrounding the Victor Valley.

In California, air quality is regulated by the California Air Resources Board (CARB). CARB divides the state into Districts (Mojave Desert (MDAQMD)) and Air Basins (Mojave Desert Air Basin (MDAB). that share similar meteorological and topographical features for management purposes.

Air Quality Standards

Monitored air quality is evaluated and in the context of ambient air quality standards. These standards are the levels of air quality that are considered safe, with an adequate margin of safety, to protect the public health and welfare. National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) currently in effect are shown in Table 3.3A. Because the State of California had established Ambient Air Quality Standards (AAQS) several years before the federal action and because of unique air quality problems introduced by the restrictive dispersion meteorology, there is considerable difference between state and national clean air standards. Those standards currently in effect in California are shown in Table 3.3A. Sources and health effects of various pollutants are shown in Table 3.3B.

Of the standards shown in Table 3.3A, those for ozone (03), and particulate matter (PM-10) are exceeded at times in the Mojave Desert Air Basin (MDAB). They are called "non-attainment pollutants." Because of the variations in both the regional meteorology and in area-wide differences in levels of air pollution emissions, patterns of non-attainment have strong spatial and temporal differences.

Table 3.3A
AMBIENT AIR QUALITY STANDARDS

Average		California S	Standards ¹	National Standards ²				
Pollutant	Average Time	Concentration ³	Method ⁴	Primary ^{3 5} •	Secondary ^{3 6} •	Method ⁷		
Ozone (0 3) ⁸	1 Hour	0.09 ppm (180 µq/m³)	Ultraviolet	- 0.070 mmm	Same as Primary	Ultraviolet Photometry		
	8 Hour	0.070 ppm (137 µq/m³)	Photometry	0.070 ppm (137 µq/m³)	Standard	Photometry		
Respirable	24 Hour	50 μg/m³	Gravimetric or	150 μg/m ³	Same as	Inertial Separation		
Particulate Matter (PM10) ⁹	Annual Arithmetic Mean	20 μg/m³	Beta Attenuation	-	Primary Standard	and Gravimetric Analysis		
Fine Particulate	24 Hour	1	1	35 μg/m³	Same as Primary Standard	Inertial Separation		
Matter (PM2.5) ⁹	Annual Arithmetic Mean	12 μg/m³	Gravimetric or Beta Attenuation	12.0 μg/m³	15.0 μg/m³	Analysis		
	1 Hour	20 ppm (23 mq/m³)	Non-Dispersive	35 ppm (4 0 mq/m ³)	-			
Carbon Monoxide	8 Hour	9 ppm (10 mq/m³)	Infrared		Infrared	9 ppm (10 mq/m ³)	-	Non-Dispersive Infrared Photometry
(CO)	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)	(NDIR)	-	-	(NDIR)		
Nitrogen	1 Hour	0.18 ppm (339 µq/m³)	Gas Phase	100 ppb (188 ua/m³)	-	Gas Phase		
Dioxide (NO2) ¹⁰	Annual Arithmetic Mean	0.030 ppm (57 μg/m³)	Chemiluminescen ce	0.053 ppm (100 µg/m³)	Same as Primary Standard	Chemiluminescence		
	1 Hour	0.25 ppm (655 µg/m³)		75 ppb (196 uo/m³)	-			
	3 Hour	-		-	0.5 ppm (1300 µq/m³)	Ultraviolet		
Sulfur Dioxide (SO2) ¹¹	24 Hour	0.04 ppm (105 µg/m³)	Ultraviolet Fluorescence	0.14 ppm (for certain areas)' '	-	Fluorescence; Spectrophotometry (Pararosaniline Method)		
	Annual Arithmetic Mean	-		0.030 ppm (for certain areas) ¹¹	-	,		

	30-Day Average	1.5 μg/m³		-	-	-
Lead 8 ¹² ¹³ .	Calendar Quarter	ı	Atomic Absorption	1.5 µg/m³ (for certain areas) ¹²	Same as Primary	High Volume Sampler and Atomic
	Rolling 3-Month Avq	-		0.15 μg/m ³	Standard	Absorption
Visibility Reducing Particles ¹⁴	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape			
Sulfates	24 Hour	25 μg/m³	lon Chromatography		No Federal Star	ndards
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µq/m³)	Ultraviolet Fluorescence			
Vinyl Chloride	24 Hour	0.01 ppm (26 µq/m³)	Gas Chromatography			

Footnotes

- California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, suspended particulate matter - PM10, PM2.5, and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
- National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest eight hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24-hour standard is attained when the expected number of days per calendar year, with a 24-hour average concentration above 150 μg/m3 is equal to or less than one. For PM2.5, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard. Contact U.S. EPA for further clarification and current federal policies.
- Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
- Any equivalent procedure which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
- National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
- National Secondary Standards: The levels of air quality ·necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
- Reference method as described by the EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the EPA.
- 8 On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
- On December 14, 2012, the national PM2.5 primary standard was lowered from 15 μ g/m3 to 12.0 μ g/m 3. The existing national 24-hour PM2.5 standards (primarily and secondary) were retained at 35 μ g/m3 as was the annual secondary standard of 15 μ g/m3. The existing 24-hour PM10 standards (primarily and secondary) of 150 μ g/m3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
- To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

- On June 2, 2010, a new 1-hour SO2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
 - Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
- The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
- The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 j.tg/m3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
- In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Table 3-3B
HEALTH EFFECTS OF MAJOR CRITERIA POLLUTANTS

Pollutants	Sources	Primary Effects
Carbon Monoxide (CO)	 Incomplete combustion of fuels and other carbon-containing substances, such as motor exhaust. Natural events, such as decomposition of organic matter. 	 Reduced tolerance for exercise. Impairment of mental function. Impairment of fetal development. Death at high levels of exposure. Aggravation of some heart diseases (angina).
Nitrogen Dioxide (NO2)	 Motor vehicle exhaust. High temperature stationary combustion. Atmospheric reactions. 	 Aggravation of respiratory illness. Reduced visibility. Reduced plant growth. Formation of acid rain.
Ozone (03)	 Atmospheric reaction of organic gases with nitrogen oxides in sunlight. 	 Aggravation of respiratory and cardiovascular diseases. Irritation of eyes. Impairment of cardiopulmonary function. Plant leaf injury.
Lead (Pb)	Contaminated soil.	 Impairment of blood function and nerve construction. Behavioral and hearing problems in children.
Fine Particulate Matter (PM-10)	 Stationary combustion of solid fuels. Construction activities. Industrial processes. Atmospheric chemical reactions. 	 Reduced lung function. Aggravation of the effects of gaseous pollutants. Aggravation of respiratory and cardiorespiratory diseases. Increased cough and chest discomfort. Soiling. Reduced visibility.

Fine Particulate Matter (PM-2.5)	 Fuel combustion in motor vehicles, equipment, and industrial sources. Residential and agricultural burning. Industrial processes. Also, formed from photochemical reactions of other pollutants, including NOx, sulfur oxides, and organics. 	 Increases respiratory disease. Lung damage. Cancer and premature death. Reduces visibility and results in surface soiling.
Sulfur Dioxide (SO2)	 Combustion of sulfur-containing fossil fuels. Smelting of sulfur-bearing metal ores. Industrial processes. 	 Aggravation of respiratory diseases (asthma, emphysema). Reduced lung function. Irritation of eyes. Reduced visibility. Plant injury. Deterioration of metals, textiles, leather, finishes, coatings, etc.

Baseline Air Quality

Monitoring of air quality in the MDAB is the responsibility of the Mojave Desert Air Quality Management District (MDAQMD) headquartered in Victorville, California. Because of the low population density of the air district, limited monitoring resources are distributed over a relatively large geographic area. The heaviest concentration of measurements is in the area of greatest development in the Victor Valley. Trona is at northwest corner of and in the City of Needles at the eastern boundary of MDAQMD. Existing levels of criteria air pollutants in the project area can generally be inferred from measurements conducted at the Hesperia monitoring station. Although the Hesperia Station does not monitor the complete spectrum of pollutants, data for NO2 and PM-2.5 are available from the Victorville Monitoring Station. CO is no longer monitored in the Mojave Desert. Table 3.3C summarizes the available monitoring history from the Hesperia and Victorville monitoring stations for the last 3 years. From these data one can infer that baseline air quality levels near the project site are occasionally unhealthful but that such violations of clean air standards usually affect only those people most sensitive to air pollution exposure. It is noted the HCSD is downwind from these higher concentration and actual pollutant levels would be less.

- a. Photochemical smog (ozone) levels occasionally exceed standards. The 8-hour state ozone standard has been exceeded approximately 19 percent of all days in the last three years while the 1-hour state standard has been exceeded almost five percent of all days. The 8-hour federal standard has been exceeded approximately 12 percent of all days in the past three years. Attainment of all clean air standards in the project vicinity is not likely to occur soon, but the severity and frequency of violations is expected to continue to slowly decline during the current decade with a variety of anthropogenic improvements.
- b. Respirable dust (PM-10) levels often exceed the state standard of 50 μg/m3 but the less stringent federal PM-10 standard of 50 μg/m3 has only been violated three times within the last three years. Year 2018 had the lowest maximum 24-hourconcentration in recent history.
- c. A substantial fraction of PM-10 is comprised of ultra-small diameter particulates capable of being inhaled into deep lung tissue (PM-2.5). There has only been one measured violation in the last three years.

Although complete attainment of every clean air standard is not yet imminent, extrapolation of the steady improvement trend suggests that such attainment could occur within the reasonably near future.

Table 3-3C PROJECT AREA AIR QUALITY MONITORING SUMMARY - 2016-2018 (DAYS STANDARDS WERE EXCEEDED AND MAXIMUM OBSERVED LEVELS)

Pollutant/Standard	2016	2017	2018
Ozone			
1-Hour > 0.09 ppm (S)	25	18	9
8-Hour > 0.07 ppm (S)	65	75	71
8- Hour> 0.075 ppm (F)	47	45	45
Max. 1-Hour Cone. (ppm)	0.119	0.114	0.113
Max. 8-Hour Cone. (ppm)	0.098	0.094	0.100
Nitrogen Dioxide			
1-Hour > 0.18 ppm (S)	0	0	0
Max. 1-Hour Cone. (ppm)	0.097	0.057	0.057
Respirable Particulates (PM-10)			
24-Hour > 50 μg/m³ (S)	9	na	na
24-Hour > 150 μ g/m ³ (F)	1	2	0
Max. 24-Hr. Cone. (μg/m³)	203.5	163.9	138.9
Fine Particulates (PM-2.5)			_
24-Hour > 35 μg/m³ (F)	1	0	0
Max. 24-Hr. Cone. (μg/m³)	41.5	27.2	32.7

na = not available; S=State Standard; F=Federal Standard Source: Hesperia Station: Ozone, PM-10, Victorville Station: CO, NO2, PM-2.5 data: www.arb.ca.gov/adam/

Air Quality Standards

The Mojave Desert AQMD has adopted numerical emissions thresholds as indicators of potential impact even if the actual air quality increment cannot be directly quantified. The MDAQMD thresholds are as follows:

Carbon Monoxide (CO)	548 pounds/day	100 tons/year
Nitrogen Oxides (NOx)	137 pounds/day	25 tons/year
Sulfur Oxides (SOx)	137 pounds/day	25 tons/year
Reactive Organic Gases (ROG)	137 pounds/day	25 tons/year
Particulate Matter (PM-10)	82 pounds/day	15 tons/year
Particulate Matter (PM-2.5)	65 pounds/day	12 tons/year
GHG	548,000 pounds/day	100,000 tons/year

Explanations:

a. **Less Than Significant Impact** - Projects such as the proposed HCSD Project do not directly-relate to the AQMP in that there are no specific air quality programs or regulations governing general development. Conformity with adopted plans, forecasts, and programs relative to population, housing, employment, and land use is the primary yardstick by which impact significance of planned growth is determined. Air quality impact significance for the proposed project has therefore been analyzed on a project-specific basis. The Project will be fully consistent with both the General Plan designation and Zone classification for the project site, mainly because the project involves water treatment, and such projects are considered land use independent. Thus, the proposed project is consistent with regional

planning forecasts maintained by the Southern California Association of Governments (SCAG) regional plans. The MDAQMD, however, while acknowledging that the AQMP is a growth-accommodating document, does not favor designating regional impacts as less-than-significant only because of consistency with regional growth projections. Air quality impact significance for the proposed project has therefore been analyzed on a project-specific basis. As the analysis of project-related emissions provided below indicates, the proposed project will not cause or be exposed to significant air pollution, and is, therefore, consistent with the applicable air quality plan.

b. Less Than Significant Impact w/Mitigation Incorporated - The project is not projected to violate any air quality standard or result in a considerable net increase to an existing or projected air quality violation. This project will not increase residential acreage or exceed residential build out projections outlined in the General Plan land use designation, which was most recently revised in 2007, prior to the most recent version of the AQMD Attainment Plan. Further, since the project is located in an area designated as non-attainment by the United States Environmental Protection Agency, an increase in vehicle trips could cumulatively contribute to the level of non-attainment. However, since this project does not increase the density or intensity outlined in the General Plan, it is assumed their cumulative impacts were included in the City's General Plan and AQMD Attainment Plan and will not exceed those growth forecasts. Therefore, since the project meets the requirements of the existing General Plan and industrial zoning designation, approval of this proposal is not anticipated to violate any air quality standard or result in a cumulatively considerable net increase in an existing or projected air quality violation.

Although not anticipated to violate any air quality standard or contribute substantially to an existing or projected air quality violation, the following mitigation has been added in order to ensure fugitive dust best management practices are followed during grading and construction activities. It is noted future use of electrical vehicles will reduce these impacts.

Mitigation Measures:

- AIR 1. Prepare and submit to the Mojave Desert Air Quality Management District (MDAQMD) a dust control plan that describes all applicable dust control measures that will be implemented at the project, prior to commencing earth-moving activity.
- AIR 2. The following signage shall be erected not later than the commencement of construction: A minimum 48 inch high by 96 inch wide sign containing the following shall be located within 50-feet of each project site entrance, meeting the specified minimum text height, black text on white background, on one inch A/C laminated plywood board, with the lower edge between six and seven feet above grade, with the contact name of a responsible official for the site and a local or toll-free number that is accessible 24 hours per day:

"[Site Name] {four-inch text}
[Project Name/Project Number] {four-inch text}
IF YOU SEE DUST COMING FROM {four-inch text} THIS PROJECT CALL: {four-inch text}
[Contact Name], PHONE NUMBER XXX-XXXX {six-inch text} If you do not receive a response, Please Call {three-inch text} The MDAQMD at 1-800-635-4617 {three-inch text}

AIR 3. Use a water truck to maintain moist disturbed surfaces and actively spread water during visible dusting episodes to minimize visible fugitive dust emissions. For projects with exposed sand or fines deposits (and for projects that expose such soils through earthmoving), chemical stabilization or covering with a stabilizing layer of gravel will be required to eliminate visible dust/sand from sand/fines deposits.

- AIR 4. If applicable, all perimeter fencing shall be wind fencing or the equivalent, a minimum of four feet and a maximum of eight feet in height. The owner/operator shall maintain the wind fencing as needed to keep it intact and remove windblown dropout. This wind fencing requirement may be superseded by local ordinance, rule or project specific biological mitigation prohibiting wind fencing.
- AIR 5. All maintenance and access vehicular roads and parking areas shall be stabilized with gravel or asphaltic pavement sufficient to eliminate visible fugitive dust from vehicular travel and wind erosion. Take actions to prevent project-related track-out onto paved surfaces and clean any project-related track-out within 24 hours. All other earthen surfaces within the project area shall be stabilized by natural or irrigated vegetation, compaction, chemical or other means sufficient to prohibit visible fugitive dust from wind erosion.
- c. **Less Than Significant Impact** The MDAQMD identifies the following land uses as sensitive receptors: residences, schools, daycare centers, playgrounds, and medical facilities. Since the proposed project is an expansion of an existing well field rather than other allowed uses by the Zoning, the project will not need to incorporate mitigation measures in order to prevent residences in the area from being exposed to any substantial pollutant concentrations or objectionable odors.

LIST CLOSEST RECEPTORS:

Silver Lakes Community is a master planned residential community located adjacent to the north and west and the nearest residence from the proposed location of the first well is 0.2± miles northerly. Helendale Elementary School is located northeast 1.5± miles.

Riverview Middle School is located northwest 1.0± miles.

Proposed New Helendale Community Park is located northeast 1.2± miles.

The Existing Helendale Community Park is located northerly 3± miles.

There is no Hospital, Assisted Living or Skilled Nursing facilities with 5± miles.

d. **Less Than Significant Impact** - See discussion 'c' above.

3.4 Biological Resources

	Issues	Potentially Significant Impact	Less than Significant w/Mitigation Incorporated	Less than Significant	No Impact
	BIOLOGICAL RESOURCES - Would the project:			•	
a)	Have substantial adverse effects, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS)? (3)		\boxtimes		
b)	Has a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS? (1; 3; 4)		\boxtimes		
c)	Has a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? (1; 4)				\boxtimes
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? (3; 12)			\boxtimes	

Well Fie	ld, Helendale Road, Helendale		October 2020		
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? (13)				\boxtimes
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? (3)	П	П	П	\bowtie

Initial Study

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BIOLOGICAL RESOURCES

Altec Land Planning

The proposed project is the replacement of a retired well, new proposed wells and expansion of an existing Well Field. The Site was adjacent to historical alfalfa fields in the early 1950s to 1970s. In the 1970, the community of Silver Lakes was being developed and has been growing steadily since that timeframe. This Site has been historically reviewed several times, specifically conducted in September 2014 with the preparation of a Phase 1 Environmental Assessment completed for Western Rivers Conservancy (c/o Cam Tredennick, Esquire, Senior Project Manager) for the acquisition of 1,640± Acres being the Safari Ranch (owner- Carl Ross) and also referred to as the Older/Palisades Ranch (longtime previous owner- Mr. and Mrs. Bob Older) and then in September 10, 2020 during the preparation of a Phase 1 Environmental Assessment, prior to potential purchase by HCSD and again on October 9, 2020 during the field review of the CEQA Initial Study for HCSD. On-Site Only and observation from perimeter fencing surveys during the preparation HCSD in 2011 [See Exhibit 6.2.1]. No specific professional land surveyor quality boundary survey has been completed. Specifically observation for Desert tortoise, Burrowing owl, Mohave ground squirrel, various riparian and nesting Raptors, and other birds and during 2020 no American badger or Desert kit fox have been observed at this Project Site. It is noted previous observation of the Site did not include presence of American badger of Desert kit fox since these are rare species to observe. See Biological Review Letter.

NOTE: Prior to any site activities, the Project Wildlife Biologist and Project Arborist shall complete a Site Survey for various species of concern and if finding absence of these species of concern shall provide a Clearance Letter to HCSD. If any of these species are encountered on the Site during project activities, those activities will cease and the Project Arborist and Project Wildlife Biologist (Randolph J. Coleman, CWB #43090, CA #8024A [760-242-9917]) contacted for guidance.

Desert Tortoise (Gopherus agassizii)

Federal Status – threatened; State Status – threatened.

Distribution – Widely distributed in the Mojave Desert from below sea level to 7,220 feet above sea level. Habitat – Most common in desert scrub, desert wash and Joshua tree habitats, but also found in other desert habitats. Tortoises are herbivores, preferring forbs over grasses and green vegetation over dry. Desert tortoises excavate burrows and nests in friable, sandy, well-drained soil under bushes, rock formations, or open areas to protect from cold in the northern ranges and from the heat in the southern ranges.

No Tortoises or active/potentially active burrows were encountered during the field survey and no other signs (e.g. shells, bones, scutes, limbs, burrows, pallets, scats, egg shell fragments, tracks, courtship rings, drinking sites.) were found, which would indicate habitat or utilization of the Site. Mitigation has been included to ensure that should desert tortoise be encountered on the site during project activities, those activities will cease, and the Project Wildlife Biologist contacted for guidance.

Burrowing Owl (Athene cunicularia)

Federal Status – none; State Status – Species of Special Concern

Distribution – yearlong resident in open, dry grassland and desert habitats, and in grass, forb and open shrub stages of pinyon-juniper and ponderosa pine habitats.

Habitat – feed on small insects, small mammals, reptiles, birds, and carrion. Use rodent or other burrows for roosting and nesting. When burrows are scarce, may nest in pipes, culverts, nest boxes, and other protected "burrows".

No Burrowing Owls, other Raptors or active/potentially active burrows or nests were encountered during the field survey, and no other signs (e.g. shells, bones, or burrows, tracks,) were found, which would indicate no

habitat or utilization of the site. In addition, no pipes, culverts, nest boxes or other protected "burrows" were located on site, and no rodent or small animal burrows were located. A thorough pedestrian review was completed on the Site and within a 500-foot Buffer area, in addition to transects of the site, and no evidence of present or past use of Burrowing Owls were found. Mitigation has been included to require additional site surveys for burrowing owls and other birds prior to earth-moving activities within specified timeframes.

Mohave Ground Squirrel (Xerospermophilus mohavensis)

Federal Status - None: State Status - Threatened.

Distribution – restricted to the Mojave Desert in San Bernardino, Los Angeles, Kern, and Inyo counties. Habitat – open desert scrub, alkali desert scrub, and Joshua tree. Uses burrows at the base of shrubs for cover. Feeds in annual grasslands. Prefers sandy to gravelly soils.

No Mohave ground squirrels were encountered during the field survey and no burrows were located and no native shrubs remain on the site.

American Badger (Taxidea taxus)

Federal Status - None; State Status - Species of Special Concern

Distribution – Uncommon, permanent resident found throughout most of the State, except in the northern North Coast area.

Habitat – Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.

No American badgers, dens, or other evidence of Badgers were found on site or within the zone of influence. In order to ensure there are no impacts to Badgers, mitigation has been included.

Desert Kit Fox (Vulpes macrotis)

Federal Status - None; State Status - Protected

Distribution – open desert, creosote bush flats and sand dunes. Majority of sightings in areas with less than twenty percent (<20%) vegetation cover.

Habitat – feed on rodents, rabbits, birds, reptiles, and insects. Use several dens throughout their home range, each with several entrances. Select birthing den in September and October, pups born in February or March, pups grown and leave to establish their own dens by October.

Title 14 of the California Code of Regulations, Section 460, identifies desert kit fox as a protected fur-bearing mammal. No desert kit fox or their dens were located on or within 100 meters of the project site. In order to ensure there are no impacts to desert kit fox, mitigation has been included.

Nesting Birds

The Migratory Bird Treaty Act of 1918, as amended, protects migratory non-game native bird species. The California Fish and Game Code sections 3503, 3503.5 and 3513 protect all nesting birds, birds-of-prey, migratory non-game birds, their nests, and eggs. Mitigation has been required to ensure that no nesting birds are inhabiting the site.

Explanations:

a. Less Than Significant Impact w/Mitigation Incorporated – Site Only surveys were specifically conducted by Altec Land Planning (Project Arborist and Project Wildlife Biologist). In September 2014 and on September 10 and October 9, 2020, which found no evidence of species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulation, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. Additionally, the biological assessment found the project site disturbed from historical agricultural use as early as 1952 and development of the Silver Lakes community in the early 1970s. The site presently contains very-little native plant species on the northerly parcel due to this previous agricultural disturbance of the site and disturbed desert of south parcel. NOTED: The Mojave River riparian corridor (significant trees and surface water) is about 1 mile southerly of this Well Site and would a variety of species of concern.

No sensitive habitats (e.g. wetlands, critical habitats for sensitive species, etc.) have been documented on the project site and none were observed during the subject field investigations. However, the site is located adjacent to the Mojave River, which is a riparian area. The adjacent Mojave River corridor has sparce riparian habitat abutting the project site. Further, the project is limited to the expansion of an existing well field, which will have substantially less impact that the underlying Residential zoning allows. Further, the proposed well(s) will be located no closer than 50 feet to any riparian trees; a mitigation measure is proposed to ensure this distance is maintained.

Some species are known to potentially be located within the general area (Desert Kit Fox and American Badger), but the project site does support suitable habitat for riparian nesting birds. Therefore, the new proposed Well Site(s) and anything within 500-feet shall be surveyed immediately prior to any construction activities on-site to determine the presence or absence of any sensitive species as well as implement specific measures for any species of concern if identified on-site. Therefore, the following mitigation measures have been included in order to ensure any impacts are less than significant.

Mitigation Measures:

- BIO 1. The well(s) shall be located no closer than fifty feet (50') from any riparian tree along the edge of the Mojave River. Further, no appurtenant facilities, construction activities, construction vehicles or equipment, or passenger vehicles or trucks shall be located or parked closer than fifty feet (50') from any riparian trees.
- BIO 2. A preconstruction survey shall be conducted by the Project Wildlife Biologist (Certified Wildlife Biologist is considered to be a qualified biologist) for the presence of American badger and Desert kit fox dens within 14 days prior to commencement of construction activities. The survey shall be conducted in areas of suitable habitat for American badger and Desert kit fox, which includes desert scrub and Joshua tree habitats. If potential dens are observed and avoidance is feasible, the following buffer distances shall be established prior to construction activities:
 - o Desert kit fox or American badger potential den: 50 feet
 - o Desert kit fox or American badger active den: 100 feet
 - o Desert kit fox or American badger natal den: 500 feet

If avoidance of the potential dens is not feasible, the following measures are recommended to avoid adverse effects to the American badger and desert kit fox:

- o If a qualified biologist determines that potential dens are inactive, the biologist shall excavate these dens by hand with a shovel and collapse them to prevent American badgers or desert kit foxes from re-using them during construction.
- o If the qualified biologist determines that potential dens may be active, an onsite passive relocation program shall be implemented. This program shall consist of excluding American badgers or desert kit foxes from occupied burrows by installation of one-way doors at burrow entrances and monitoring of the burrow for seven days to confirm usage has been discontinued, and excavation and collapse of the burrow to prevent reoccupation. After the qualified biologist determines that American badgers and desert kit foxes have stopped using active dens within the project boundary, the dens shall be hand-excavated with a shovel and collapsed to prevent re-use during construction.
- During fencing and grading activities daily monitoring reports shall be prepared by the monitoring biologists. The biologist shall prepare a summary monitoring report documenting the effectiveness and practicality of the protection measures that are in place and making recommendations for modifying the measures to enhance species protection, as needed. The report shall also provide information

on the overall activities conducted related to biological resources, including the Environmental Awareness

Training and Education Program, clearance/pre-activity surveys, monitoring activities, and any observed special -status species, including injuries and fatalities. These monitoring reports shall be submitted to HCSD and relevant resource agencies as applicable on a monthly basis along with copies of all survey reports.

BIO 3. A Certified Wildlife Biologist shall conduct a preconstruction survey of the impact areas to confirm presence/absence of burrowing owl individuals no more than 30 days prior to construction. The survey methodology will be consistent with the methods outlined in the CDFW Staff Report on Burrowing Owl Mitigation (2012). If no active breeding or wintering owls are identified, no further mitigation is required.

If burrowing owls are detected onsite, the following mitigation measures shall be implemented in accordance with the CDFW Staff Report on Burrowing Owl Mitigation (2012):

- o A Certified Wildlife Biologist shall be onsite during initial ground -disturbing activities in potential burrowing owl habitat.
- No ground-disturbing activities shall be permitted within a buffer no less than 200 meters (656 feet) from an active burrow, depending on the level of disturbance, unless otherwise authorized by CDFW. Occupied burrows will not be disturbed during the nesting season (February 1 to August 31), unless a qualified biologist verifies through noninvasive methods that either: (1) the birds have not begun egg-laying and incubation; or (2) juveniles from the occupied burrows are foraging independently and are capable of independent survival.
- O During the nonbreeding (winter) season (September 1 to January 31), ground-disturbing work can proceed near active burrows as long as the work occurs no closer than 50 meters (165 feet) from the burrow, depending on the level of disturbance, and the site is not directly affected by the project activity. A smaller buffer may be established in consultation with CDFW. If active winter burrows are found that would be directly affected by ground-disturbing activities, owls can be excluded from winter burrows according to recommendations made in the Staff Report on Burrowing Owl Mitigation (2012).
- o Burrowing owls shall not be excluded from burrows unless or until a Burrowing Owl Exclusion Plan is developed based on the recommendations made in the Staff Report on Burrowing Owl Mitigation (2012). The plan shall include, at a minimum:
- o Confirmation by site surveillance that the burrow(s) is empty of burrowing owls and other species
- Type of scope to be used and appropriate timing of scoping
- Occupancy factors to look for and what shall guide determination of vacancy and excavation timing
- Methods for burrow excavation
- o Removal of other potential owl burrow surrogates or refugia onsite
- Methods for photographic documentation of the excavation and closure of the burrow,
- o Monitoring of the site to evaluate success and, if needed, to implement remedial measures to prevent subsequent owl use to avoid take
- o Methods for assuring the impacted site shall continually be made inhospitable to burrowing owls and fossorial mammals
- o Compensatory mitigation for lost breeding and/or wintering habitat shall be implemented onsite or off-site through implementation of a Mitigation Land

- Management Plan based on the Staff Report on Burrowing Owl Mitigation (CDFW 2012) guidance. The plan shall include the following components, at a minimum:
- o Temporarily disturbed habitat on the project site shall be restored, if feasible, to pre-project conditions, including de-compacting soil and revegetation;
- o Permanent impacts to nesting, occupied and satellite burrows and/or burrowing owl habitat shall be mitigated such that the habitat acreage, number of burrows and burrowing owl impacted are replaced based on a site-specific analysis which includes conservation of similar vegetation communities comparable to or better than that of the impact area, and with sufficiently large acreage, and presence of fossorial mammals;
- o Mitigation land acreage shall not exceed the size of the project site;
- o Permanently protect mitigation land through a conservation easement deeded to a nonprofit conservation organization or public agency with a conservation mission. If the project is located within the service area of a CDFW approved burrowing owl conservation bank, the project operator may purchase available burrowing owl conservation bank credits.
- o Fund the maintenance and management of mitigation land through the establishment of a long-term funding mechanism such as an endowment.
- o Mitigation lands shall be on, adjacent or proximate to the impact site where possible and where habitat is sufficient to support burrowing owls present.
- BIO 4. If project activities must occur during the avian nesting season (February to September), a survey for active nests must be conducted by a qualified biologist, one to two weeks prior to the activities. If active nests are identified and present onsite, clearing and construction within 50-250 feet of the nest, depending on the species involved (50 feet for common urban-adapted native birds and up to 250 feet for raptors), shall be postponed until the nest is vacated and juveniles have fledged, and there is no evidence of a second attempt at nesting. Limits of construction to avoid a nest site shall be established in the field by a qualified biologist with flagging and stakes or construct ion fencing. Construction personnel shall be instructed regarding the ecological sensitivity of the fenced area. If construction must occur within this buffer, it shall be conducted at the discretion of a qualified biological monitor to assure that indirect impacts to nesting birds are avoided.
- BIO 5. If sensitive wildlife species such as the Desert Tortoise or the Mohave Ground Squirrel, Desert Kit Fox, or nesting birds are detected on the project site during future surveys or assessments or construction, all work on-site shall stop immediately and mitigation measures shall be required to reduce impact to a level of less than significant. Any proposed mitigation measures shall be determined by a Certified Wildlife Biologist and be approved by HCSD and the California Department of Fish and Wildlife as applicable in accordance with typical best practices.

Additionally, because the biological survey is typically valid for 1-year for the above-mentioned species, except for the Burrowing Owls and Nesting Birds, the following mitigation measure has been included.

Mitigation Measure:

BIO 6. Should grading or construction commence after February 1st, 2021, a new biological survey shall be filed with the HCSD as a Biological Clearance Letter to determine the presence or absence of endangered species on the site. Said survey shall be filed with HCSD or designee prior to issuance of a required permit(s). The survey shall be valid for a period of one year or as specifically delineated above for various bird species.

- b. Less Than Significant Impact w/Mitigation Incorporated The project site is not located within any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. However, the site is located adjacent to the Mojave River, which is a riparian area. This portion of the Mojave River has sparce riparian habitat abutting the project site. Further, the project is limited to the expansion of an existing well field, which will have substantially less impact that the underlying Residential zoning allows. Further, the proposed well(s) will be located no closer than 50 feet to the riparian trees; a mitigation measure is proposed to ensure this distance is maintained (see section a. above, BIO 1).
- c. **No Impact** The project site does not include any state or federally protected wetlands as protected under CEQA, Section 1600 of the California Fish and Game Code, or as defined by Section 404 of the Clean Water Act.
- d. Less Than Significant Impact The project will not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites since the site does not include disturbances to any sensitive areas. Additionally, the only identified wildlife corridors of special concern are located within the area of the Mojave River riparian corridor, which is adjacent to this well field. However, the project is the expansion of an existing well field, which will not include development of the entire site. Therefore any wildlife traversing the site will still be able to do so after the well(s) are constructed.
- e. **No Impact** There are no native or protected plants located on the site due to the previous site disturbance by historical agricultural use. Therefore there is no conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance
- f. **No Impact** -The plan will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan since there is no adopted Habitat Conservation Plan or Natural Community Conservation Plan in the project area or local region.

3.5 Cultural Resources

	Issues	Potentially Significant Impact	Less than Significant w/Mitigation Incorporated	Less than Significant	No Impact
	CULTURAL RESOURCES - Would the project				
a)	Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5? (3; 28)		\boxtimes		
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? (3)		\boxtimes		
c)	Disturb any human remains, including those interred outside of dedicated cemeteries? (3; 4; 28)		\boxtimes		

CULTURAL RESOURCES

The proposed project is to allow for the expansion of an existing well field. The site has significant disturbance from historical agricultural use, and vehicular, ATV, and pedestrian traffic. Historical Agricultural use has disturbed the ground to an estimated depth of 18± inches and disturbing any potential cultural resources near the surface is not anticipated. Further, the project does not include development over the entire site, but only in specified areas where water production wells are to be constructed and appurtenant water and electrical lines.

A review of projects submitted to the County of San Bernardino in the surrounding area, identified two previous projects where Cultural Resource studies were prepared. The first is the Route 66 Market and Gas located approximately 4,000 feet northeast of the site at 26426 National Trails Highway (APN 0467-101-12), see Exhibit 6.2.2 and 6.2.3. The second is a cellular service tower located approximately 8,000 feet northwest of the site, see and 6.2.4.

It is not anticipated that cultural resources would be located on this project site. However, mitigation is proposed in the event that evidence of cultural resources is discovered during well construction.

Explanations:

a.-d. Less Than Significant Impact with Mitigation Incorporated – It is reasonable that no cultural resources are located on the site, for the reasons noted above. Mitigation measures are recommended in the event evidence of cultural resources are discovered.

A Tribal consultation list and sacred lands file search have been requested of the Native American Heritage Commission. Once a list is received the interested area Tribes will be notified of the project per the AB52 process, which may result request(s) for tribal consultation, or amendment of the mitigation measures. Any such amendments will be made prior to the Board taking action on this item.

Mitigation Measures:

- CUL 1. In the event that Tribal cultural resources are discovered during the project earth moving or construction activities, all work in the immediate vicinity of the find shall cease and a qualified archaeologist and appropriate local Tribe or Band shall assess the significance of such resources and shall meet and confer regarding the mitigation for such resources. The Helendale CSD cedes to the San Manuel Band of Mission Indians (SMBMI) for ultimate determination and all tribal resources to SMBMI. SMBMI is a non-collection tribe and all resources shall be reburied on-site at a location that does not impact future well locations and additionally complies with the provisions of CEQA with respect to archaeological resources and shall take into account the religious beliefs, customs and practices of the Tribe or Band.
- CUL 2. If significant Tribal cultural resources are discovered, for which a Treatment Plan must be prepared, HCSD or qualified archaeologist shall contact the appropriate Tribe or Band for collaboration on Treatment Plan development.
- CUL 3. If requested by a Tribe or Band, the developer or the qualified archaeologist shall, in good faith, consult with Tribal representatives on the discovery and its disposition (e.g. avoidance, preservation, return of artifacts to tribe, etc.).

California law protects Native American burials, skeletal remains, and associated grave goods, regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. California Health and Safety Code Section 7050.5 requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains can occur until the County Coroner has examined the remains (Section 7050.5b). If the coroner determines or has reason to believe that the remains are those of a Native American, the coroner must contact the Native American Heritage Commission (NAHC) within 24 hours (Section 7050.5c). The NAHC will notify the Most Likely Descendant (MLD), and with the permission of the landowner, the Most Likely Descendant may inspect the site of discovery. The inspection must be completed within 24 hours of notification of the Most Likely Descendant by the NAHC. The Most Likely Descendant may recommend means of treating or

disposing of, with appropriate dignity, the human remains and items associated with Native Americans. The following mitigation measure is recommended:

Mitigation Measure:

CUL 4. In the event that any human remains, burials, or funerary objects are discovered within the project area, all earthmoving work and/or construction in the immediate vicinity shall be suspended and an environmentally sensitive area physical demarcation/barrier constructed. The County Corner and Helendale Community Services District shall immediately be contacted pursuant to State Health and Safety Code §7050.5. If the Coroner determines the remains to be Native American, or has reason to believe they are Native American, the State Native American Heritage Commission (NAHC) shall be contacted within twenty-four (24) hours as required by California Health and Safety Code Section 7050.5(c).

The NAHC-identified Most Likely Descendant (MLD) shall be allowed under California Public Resources Code Section 5097.98(a), to (1) inspect the site of the discovery and (2) make determinations as to how the human remains and funerary objects shall be treated and disposed of with appropriate dignity. The MLD, Lead Agency/Landowner agree to discuss in good faith what constitutes "appropriate dignity" as that term is used in the applicable statutes. The MLD shall complete its inspection and make recommendations within forty-eight (48) hours of the site visit, as required by California Public Resources Code Section 5097.98.

Reburial of human remains and/or funerary objects (those artifacts associated with any human remains or funerary rites) shall be accomplished in compliance with the California Public Resources Code Section 5097.98 (a) and (b). The MLD in consultation with the landowner, shall make the final discretionary determination regarding the appropriate disposition and treatment of human remains and funerary objects. All parties are aware that the MLD may wish to rebury the human remains and associated funerary objects on or near the site of their discovery, in an area that shall not be subject to future subsurface disturbances. The Lead Agency/Landowner should accommodate on-site reburial in a location mutually agreed upon by the Parties.

It is understood by all Parties that unless otherwise required by law, the site of any reburial of Native American human remains or cultural artifacts shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The Coroner and all other parties will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code Section 6254(r).

Work shall not resume until such time as the site has been cleared by the County Coroner or qualified archaeologist or Tribal representative.

3.6 Energy

	Issues	Potentially Significant Impact	Less than Significant w/Mitigation Incorporated	Less than Significant	No Impact	
	ENERGY - Would the project:				•	
a)	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? (3; 8; 27)	П	П	\bowtie	П	

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h)	Conflict with or obstruct a state or local plan for renewable energy or energy			
b)	efficiency? (3; 8; 27)		\boxtimes	

ENERGY

The project which is comprised of the expansion of an existing well field on a site which presently contains three (3) water production wells on-site, and two (2) off-site.

Explanations:

Less than Significant Impact. Each well would be constructed with a pump that would consume a.-b. about 1.0 million kilowatt hours per year. Energy consumption encompasses many different activities. For example, construction can include the following activities: delivery of equipment and material to a site from some location (note it also requires energy to manufacture the equipment and material, such as harvesting. cutting and delivering resources); employee trips to work, possibly offsite for lunch (or a visit by a catering truck), travel home, and occasionally leaving a site for an appointment or checking another job; use of equipment onsite (electric or fuel); and sometimes demolition and disposal of construction waste. For the proposed project, the number of employees will be limited due to the small size of the Project and site. Demolition, beyond the removal of a small section of concrete and asphalt to install the connecting pipeline, is not anticipated to be required for this project. To minimize energy costs of construction debris management, laws are in place that require diversion of all material subject to recycling. Energy consumption by equipment will be reduced by requiring shutdowns when equipment is not in use after five minutes and ensuring equipment is being operated within proper operating parameters (tune-ups) to minimize emissions and fuel consumption. These requirements are consistent with State and regional rules and regulations. Under the construction scenario outlined in the project description, the proposed project will not result in wasteful, inefficient, or unnecessary energy consumption during construction.

The proposed project initially will construct a replacement well and ultimately develop several wells that will contribute to HCSD's existing potable water distribution. No new employees are anticipated to be required in support of the Project once the well(s) is in operation. The initial well replaces an abandoned well and use the existing nearby electrical supplies and additional well project will be supplied additional power from Southern California Edison (SCE). Additionally, HCSD may install emergency backup generators at each of the sites, depending upon proper water management. As such, the Project is not anticipated to require a significant amount of electricity. The well and supporting infrastructure must be constructed in conformance with a variety of existing energy efficiency regulatory requirements or guidelines including, but not limited to the following:

- Compliance California Green Building Standards Code, AKA the CALGreen Code (Title 24, Part 11), which became effective on January 1, 2017. The purpose of the CALGreen Code is to improve public health, safety, and general welfare by enhancing the design and construction of building through the use of building concepts encouraging sustainable construction practices.
- Compliance with the Building Energy Efficiency Standards (CBSC) would ensure that the building energy use associated with the proposed project would not be wasteful or unnecessary.
- Compliance with diversion of construction and demolition materials from landfills.
- Compliance with AQMD Mandatory use of low-pollutant emitting finish materials.
- Compliance with AQMD Rules 431.1 and 431.2 to reduce the release of undesirable emissions.
- Compliance with diesel exhaust emissions from diesel vehicles and off-road diesel vehicle/equipment operations.
- Compliance with these regulatory requirements for operational energy use and construction energy use would not be wasteful or unnecessary use of energy.

Further, Southern California Edison (SCE) is presently in compliance with State renewable energy supply requirements and SCE will supply electricity to the Project. Under the operational scenario for the proposed project, the proposed project will not result in wasteful, inefficient, or unnecessary energy consumption that could result in a significant adverse impact to energy issues based on compliance with the referenced laws, regulations, and guidelines. No mitigation is required.

3.7 Geology and Soils

	Issues	Potentiall y Significan t Impact	Less than Significant w/Mitigation Incorporated	Less than Significant	No Impact
	GEOLOGY AND SOILS - Would the project:				
a)	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map Issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42 (7) ii. Strong seismic ground shaking? (7) iii. Seismic-related ground failure, including liquefaction? (7) iv. Landslides? (5)				
b)	Result in substantial soil erosion or the loss of topsoil? (5; 7; 22)			\boxtimes	
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? (5; 7)			\boxtimes	
d)	Be located on expansive soil, as defined in Table 181-B of the California Building Code (2013) creating substantial direct or indirect risks to life or property? (5; 8)				
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? (15)				
f)	Directly or Indirectly destroy a unique paleontological resources or site unique geological features (3)			\boxtimes	

GEOLOGY AND SOILS

The project area is located in seismically active Southern California, a region that has experienced numerous earthquakes in the past. The Alquist-Priolo Special Studies Zones Act specifies that an area termed an Earthquake Fault Zone is to be delineated if surrounding faults that are deemed sufficiently active or well defined after a review of seismic records and geological studies. Neither the community nor the project area is located within any Alquist-Priolo Special Studies Zones.

The topography of Helendale varies from gently sloping to rolling hills and occasionally dissected by intermittent natural drainage courses (improved channels in Silver Lakes) to the Mojave River. The major environmental factors controlling stability of the steeper hillsides include precipitation, topography, geology, soils, vegetation, and man-made modifications to the natural topography. The subject site is gently sloping, decreasing in elevation from 2,490 feet above mean sea level at the southern point of the site to 2,455 feet above mean sea level at the northern point of the site. The site has been historically heavily disturbed by agricultural use for approximately 70 years.

Explanations:

a. **No Impact** - The proposal will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death as the project does not propose development anywhere where it is not already permitted.

 Less than Significant Impact - There are no known or suspected fault traces located within the Helendale area. Additionally, it is not subject to the provisions of Alquist- Priolo Fault Zoning Act.

The project site is not within an Earthquake Fault Zone according to the California Alquist-Priolo Earthquake Fault Zone and Seismic Hazard Maps from the California Department of Conservation (See Exhibit 6.1.7). However, USGS Fault Maps identify the nearest faults as shown below.

Fault	Location
Helendale-South Lockhart fault zone	2 miles northeast
Blake Ranch Fault	10 miles west
Mirage Valley fault zone	11 miles southwest
Kramer Hills fault zone	13 miles northwest
Lenwood-Lockhart fault zone	22 miles east
North Frontal Thrust System	22 miles southeast
Cleghorn Fault Zone	30 miles south
San Andreas Fault Zone	30 miles southwest

The project is the expansion of an existing well field. New water production wells will be constructed to meet all seismic requirements of the County of San Bernardino. Therefore, the impact due to rupture will be less than significant.

- ii. **Less Than Significant Impact** The project is located in an area with a high potential for severe ground-shaking. Regardless, construction of building(s) must comply with the requirements of the County of San Bernardino which will ensure they would adequately resist the forces of an earthquake.
- iii. **Less than Significant Impact** Liquefaction is the loss of soil strength as a result of an increase in pore water pressure due to dynamic earthquake loading. Conditions for liquefaction to occur generally include relatively high water table (within 40 feet of the ground surface), low relative densities of the saturated soils, and a susceptibility of the soil to liquefy based on grain size. Reviewing existing data sources indicate that the groundwater varies from more than 80' and less than a depth of 40' on the Site.
 - 117 Cajon Loamy Sand (majority of Site);
 - 103 Badlands (Dike along Mojave River southward from drainage channel);
 - 113 Cajon Sand (Dike along Mojave River northward drainage channel); 171 Villa Loamy Sand (Drainage Channel); and

163 – Torriorthents-Torripsamments-Urban Land Complex (Along Silver Lakes development).

The soil sequence is predominantly in a relatively dense state, hence the potential for onsite liquefaction is considered less than significant.

- iv. No Impact The proposed project would not have any risks associated with landslides. Landslides are the downslope movement of geologic materials. The stability of slopes is related to a variety of factors, including the slope's steepness, the strength of geologic materials, and the characteristics of bedding planes, joints, faults, vegetation, surface water, and groundwater conditions. The project area is relatively flat terrain where landslides do not occur; therefore, impacts are considered less than significant with respect to seismic-related (or other) landslide hazards.
- b. Less Than Significant Impact The project will not result in substantial soil erosion or the loss of topsoil, because the site has minimal slopes and lower stormwater velocities. The project will utilize disturbed land which is currently used for a water production well field, ground disturbance will be minimized by the minimal amount of ground disturbance to the site which would reduce soil erosion by soils being fixed in place by vegetation.

During construction, the project sites have a potential for soil erosion. Though not extensive, the disturbance associated with trenching the pipeline alignment within the project sites to connect to HCSD's distribution system, as well as site clearing and grading where the well will be developed, there is a potential for soil erosion. The project may result in exposing some soil to erosion during site grading activities before the well is drilled. The proposed project will be required to meet NPDES requirements. These will be met by requiring the construction contractor to use BMPs to control potential erosion and drainage off-site. Additionally, the mitigation measures identified below will be implemented and therefore, the potential for substantial soil erosion or loss can be controlled to a less than significant impact level. Based on the mitigation listed below, best management practices (BMPs) will be employed during construction to minimize the potential for soil erosion impacts.

Mitigation Measures:

- GE0 1. Stored backfill material shall be covered with water resistant material during periods of heavy precipitation to reduce the potential for rainfall erosion of the material. If covering is not feasible, then measures such as the use of straw bales or gravel bags shall be used to capture and hold eroded material on the project site for future cleanup.
- GE0 2. Excavated areas shall be properly backfilled and compacted. Paved areas disturbed by this project will be repaved in such a manner that pipeline connections within adjacent roadways and other disturbed areas are returned to as near the pre-project condition as is feasible.
- GE0 3. All exposed, disturbed soil (trenches, stored backfill, etc.) will be sprayed with water or soil binders twice a day or more frequently if fugitive dust is observed migrating from either of the well sites within which the water facilities are being installed.

GE0 4. The length of trench which can be left open at any given time will be limited to that needed to reasonably perform construction activities. This will serve to reduce the amount of backfill stored onsite at any given time.

The following mitigation measure will be implemented to ensure the discharge of surface runoff from the sites does not result in significant soil erosion or loss of topsoil.

GE0 5. The HCSD shall identify any additional BMPs to ensure that the discharge of surface water does not cause erosion downstream of the discharge point. This shall be accomplished by reducing the energy of any site discharge through an artificial energy dissipater or equivalent device. If any substantial erosion or sedimentation occurs, any erosion or sedimentation damage shall be restored to pre-discharge conditions.

Implementation of the above measures in conjunction with mitigation measures identified in the Hydrology/Water Quality Section will adequately mitigate potential impacts associated with the water- related erosion of soil.

- c. Less Than Significant Impact As previously noted, due to the plan areas insignificant slopes, soil characteristics, and low liquefaction susceptibility, the area is not considered unstable and should not become unstable as a result of this project.
- d. **No Impact** Typically, soils in Helendale have a low or very-low probability of expansive soils as defined in Table 18-1-B of the Uniform Building Code (1994).
- e. **No Impact** The project does not propose any septic tanks or alternative wastewater disposal systems. Therefore, determining if the Project site soils are incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater does not apply. No impacts are anticipated. No mitigation is required.
- f. Less Than Significant Impact w/Mitigation Incorporated Helendale is in a potential resource rich area as far as paleontological resources are concerned. However, previous historical agricultural use of the site disturbed the ground to an estimated depth of 18+/- inches, disturbing any archaeological and paleontological resources near the surface. Further, Cultural Resources studies near the project site found no resources, and no resources are anticipated on the site. However, Mitigation is recommended in the event evidence of paleontological resources is found during earth-moving or drilling operations.

Mitigation Measure:

GEO 6. In the event that fossils are discovered during the project development/construction, all work in the immediate vicinity of the find shall cease and a qualified paleontologist shall be hired to assess the find. Work on the overall project may continue during this assessment period.

3.8 Greenhouse Gas Emissions

Issues	Potentially Significant Impact	Less than Significant w/Mitigation Incorporated	Less than Significant	No Impact
GREENHOUSE GAS EMISSIONS - Would the project:				

	ield, Helendale Road, Helendale		O	October 2020
a)	Generate greenhouse gas emissions, either directly or indirectly, that make a significant impact on the environment? (3; 31)	nay 🔲 [\boxtimes
b)	Conflict with an applicable plan, policy or regulation adopted for the pur reducing the emissions of greenhouse gases? (3; 31)	rpose of		X

GREENHOUSE GAS EMISSIONS

Explanations:

- Less Than Significant Impact The San Bernardino County 2007 Development Code, Chapter 84.30 a. "GREENHOUSE GAS REDUCTION PLAN; AND GHG REDUCTION PLAN". With the passage of California Assembly Bill AB32, the Global Warming Solutions Act of 2006, jurisdictions are required to reduce their greenhouse gas (GHG) emissions to 1990 levels by 2020. To comply with this legislation San Bernardino County Transportation Authority (SBCTA was formerly SANBAG - San Bernardino Association of Governments) to conduct a Countywide GHG inventory and GHG Reduction Plan. With that process complete, the County of San Bernardino has adopted a Climate Action Plan (CAP) to demonstrate how the County will reduce its GHG emissions in compliance with AB32. The CAP is not additional regulation created, in as much as the regulation to reduce GHG's already exists under CEQA, including Section 15064.4 Determining the Significance of Impacts from GHG Emissions. The CAP assists in streamlining the CEQA review by allowing developers to demonstrate that their projects are consistent with the CAP by demonstrating compliance through a screening table process that the County has developed along with SBCTA, thus not requiring the developer to conduct a complete. With the initial replacement of an existing well, it is determined the does not rise to a level of requiring a GHG analysis on its own for CEQA processing. If additional significant development is proposed on the Site beyond the additional construction of 2 replacement water wells, then that proposed significant development will require its own GHG analysis at that time and the developer will be subject to the "then current" screening table process which allows the developer to choose any of a number of reduction measures through the Performance Standard PS-1 of reduction measures. Currently, for a project to meet the reduction goal through the screening tables, 45-points must be achieved. In the event of future significant development on the Project Site, the applicant shall submit an appropriate GHG Emission screening table review form indicating the then current amount of points (currently 45 points) to be achieved. Since the proposed project is consistent with the adopted CAP, all GHG impacts, including cumulative, will be less than significant.
- b. **Less Than Significant Impact** No conflict would occur with any established plan, policy or regulation adopted for the purposes of reducing the emissions of greenhouse gases. Refer to conformance measures specified in the above Section "a."

3.9 Hazards and Hazardous Materials

	Issues	Potentially Significant Impact	Less than Significant w/Mitigation Incorporated	Less than Significant	No Impact
	HAZARDS AND HAZARDOUS MATERIALS - Would the project:				
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? (1)				
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? (1)				
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? (1)			\boxtimes	

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d)	Be located on a site, which is included on a list of hazardous materials 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? (7)				\boxtimes		
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 or excessive noise for people residing or working in the project area? (1; 4)				\boxtimes		
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? (7)		\boxtimes				
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? (1: 4: 7)			П	\square		

HAZARDS AND HAZARDOUS MATERIALS

Explanations:

- a. Less Than Significant Impact - The proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. However, operation and testing of the proposed wells would require the storage of chemicals necessary for treating the water extracted from the well. It is unknown at this time what treatment will be required for the well to meet the standards of the State Water Resources Control Board (SWRCB) Division of Drinking Water (DDW). However, it is likely that sodium hypochlorite or other approved methods may be required for disinfection to treat the water extracted from the proposed well. All substances typically utilized to treat well water shall be by approved methods and shall not be potentially hazardous substances. However, HCSD will comply with all Federal, State and Regional standards. Furthermore, HCSD has developed safety standards and operational procedures for safe transport and use of its operational and maintenance materials that are potentially hazardous. These procedures will comply with all federal, state, and local regulations will ensure that the Project operates in a manner that poses no substantial hazards to the public or the environment. No additional mitigation is necessary to ensure the impact of managing these chemicals result in a less than significant impact on the environment. Therefore, potential impacts to the public or the environment through accidental release due to the routine transport, use, or disposal of hazardous materials would be less than significant, HCSD has standard operational procedures for safe transport and use of its operational and maintenance materials. No additional measures are necessary to ensure the impact of managing this chemical result in a less than significant impact on the environment.
- b. Less Than Significant Impact w/Mitigation Incorporated During construction or maintenance activities in support of the proposed project, all fuels, oils, solvents, and other petroleum materials classified as "hazardous" will be used according to Federal, State, Regional, and Local requirements and regulations. Mitigation designed to reduce, control, or remediate potential accidental releases must be implemented to prevent the creation of new contaminated areas that may require remediation in the future and to minimize exposure of humans to public health risks from accidental releases. The following mitigation measure reduce such accidental spill hazards to a less than significant level:

Mitigation Measure:

HAZ 1.All spills or leakage of petroleum products during construction activities will be remediated in compliance with applicable state and local regulations regarding cleanup and disposal of the contaminant released. The contaminated waste will be collected and disposed of at an appropriately licensed disposal or treatment facility.

By implementing this measure, potentially substantial adverse environmental impacts from accidental releases associated with installation of the proposed wells can be reduced to a less than significant level.

- c. Less Than Significant Impact All of the well sites are located 1± miles from schools, however, it is not anticipated to emit hazardous emissions or handle hazardous materials or substances that would cause a significant impact to local schools. The nearest school is Rivers Edge Middle Schools which is located 1± miles to the northwest and the Helendale Elementary School 1.5± miles to the northeast. Given the safety measures in place for the proposed wells, it is not anticipated that the project would emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste during construction or operation in a quantity that would pose any danger to people adjacent to, or in the general vicinity of, the project site. Therefore, the impacts of the proposed project to this issue area would be considered less than significant.
- d, e, g **No Impact** The project site is not identified on a list of hazardous materials sites and is not located in an airport land use plan or within the vicinity of any public or private airstrip that would be affected. It is also located in an area where the risk of wildland fires is not high due to the low density of vegetation.
- f. Less Than Significant Impact w/Mitigation Incorporated The proposed well development will be confined to the project site and is not anticipated to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The pipeline that will connect each new well to HCSD's potable water system may involve a small amount of work within Helendale Road and/or Shadow Mountain Road, but this will occur during a limited period of time. A limited potential to interfere with an emergency response or evacuation plan will occur during construction. The project site is not located within an identified emergency access route. Therefore, no such plans will be affected by the Project. Refer to the Transportation/Traffic Section of this document. Mitigation to address traffic disruption and emergency access issues are included in this section. Impacts are reduced to a less than significant level with mitigation incorporated. No additional mitigation is required.

3.10 Hydrology and Water Quality

	Issues	Potentially Significant Impact	Less than Significant w/Mitigation Incorporated	Less than Significant	No Impact
	HYDROLOGY AND WATER QUALITY - Would the project:				
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? (3; 16)		\boxtimes		
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede substantial groundwater management of the basin? (1; 3; 17; 22)		\boxtimes		
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (16) i) result in substantial erosion or siltation on- or off-site; ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or iv) impede or redirect flood flows? (7, Panel 06071C5150J)				
	, ,	_	_		_
d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? (7)			\boxtimes	

٥)	Conflict with or obstruct implementation of a water quality control plan or			
e)	sustainable groundwater management plan?		\boxtimes	

HYDROLOGY AND WATER QUALITY

The Helendale CSD provides domestic water to the Helendale area, and the primary source of fresh water is groundwater extracted by numerous wells. This project proposes to expand an existing well field which has three (3) production wells currently on-site and two (2) off-site.

The project site and surrounding areas are subject to San Bernardino County requirements relating to flood control, and the National Pollution Discharge Elimination System (NPDES) to protect surface water from pollution. There is no off-site stormwater affecting the Site and the proposed expansion of an existing well field does proposes productions wells on only a portion of the site.

Overall, project related impacts are anticipated to be less than significant.

Explanations:

Less Than Significant Impact w/Mitigation Incorporated - Installation of the proposed well and a. connecting pipeline includes activities that have a potential to violate water quality standards or waste discharge requirements due to direct discharge of water brought to the surface during well testing. Prior to pumping large quantities of water from the proposed municipal-supply water well, HCSD will need to test the quality of the water to verify that it does not contain contaminants that would exceed the standard water quality objectives for this portion of the South Lahontan Watershed. The RWQCB would have jurisdiction over the groundwater quality and surface water discharges for all new wells. A General Permit within the Regional Board's jurisdiction covers the discharge of groundwater generated from well drilling and development activities. This General Permit establishes specific performance requirements for discharges from well activities and the proposed project must comply with these requirements. Before discharge from each well test program can proceed, sampling must be completed to ensure that maximum contaminant levels (MCLs) are not exceeded in the groundwater brought to the surface and discharged. If water quality at one of the proposed wells is degraded it must be blended to a level below MCLs or any specific pollutant exceeding MCLs must be treated and brought into compliance with General Permit discharge requirements prior to discharge to meet the MCL requirements for that pollutant. The following mitigation measure ensures that no significantly degraded groundwater (above MCLs) will be discharged during well testing:

Mitigation Measure:

HYD 1.HCSD shall test the groundwater produced from the well prior to discharge. Prior to or during discharge any contaminants shall be blended below the pertinent MCL or treated prior to discharge, including sediment or other material.

HYD 2.HCSD shall prepare a Drilling Plan that describes the drilling method and construction contingencies to be employed. That plan shall describe waste management control and disposal methods for cuttings, mud, and development water discharges. The Drilling Plan should identify, and illustrate on appropriate scale maps, the Best Management Practices (BMPs) that will be employed to ensure there are no adverse effects on ground or surface water quality. HCSD shall indicate how they will implement and monitoring the effectiveness of installed BMPs, and make necessary adjustments in the field, if necessary, to modify those

BMPs and protect water quality. The Drilling Plan shall be made available to the Lahontan Regional Water Quality Control Board for their records according to rules and regulations.

The proposed project may result in minor soil erosion during any construction activities. Due to the varied nature of the proposed project sites-varying from disturbed compacted dirt to containing native and non-native vegetation and the flat topography at each well site (excluding the Mojave River bluffs), the potential for this project to cause soil erosion, and subsequent water quality impacts, is moderate. The proposed project will be required to meet NPDES requirement. HCSD must file a Notice of Intent (NOI) with the State Water Resources Control Board and obtain a general construction National Pollutant Discharge Elimination System (NPDES) stormwater discharge permit prior to the start of construction due to the area of impact for the proposed project, if the disturbed area cumulatively to be more than 1 acre. It is anticipated cumulatively to be less than 1 acre. Obtaining coverage under the General Construction NPDES permit requires the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) which specifies Best Management Practices (BMPs) that must be implemented during construction. If applicable, compliance with the terms and conditions of the NPDES and the SWPPP is mandatory and is judged adequate mitigation by the regulatory agencies for potential impacts to stormwater during construction activities.

Mitigation Measure:

HYD 3. The County shall require of HCSD that the construction contractor prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) which specifies Best Management Practices (BMPs) that will prevent all construction pollutants from contacting stormwater and with the intent of keeping all products of erosion from moving offsite into receiving waters. The SWPPP shall include a Spill Prevention and Cleanup Plan that identifies the methods of containing, cleanup, transport and proper disposal of hazardous chemicals or materials released during construction activities that are compatible with applicable laws and regulations. BMPs to be implemented in the SWPPP may include but not be limited to:

- The use of silt fences;
- The use of temporary stormwater desilting or retention basins; The use of water bars to reduce the velocity of stormwater runoff;
- The use of wheel washers on construction equipment leaving the site;
- The washing of silt from public roads at the access point to the site to prevent the tracking of silt and other pollutants from the site onto public roads;
- The storage of excavated material shall be kept to the minimum necessary to efficiently perform the construction activities required. Excavated or stockpiled material shall not be stored in water courses or other areas subject to the flow of surface water; and
- Where feasible, stockpiled material shall be covered with waterproof material during rain events to control erosion of soil from the stockpiles.

Implementation of the above mitigation measure, as well as mitigation measures HAZ-1, and HYD-4 below, is considered adequate to reduce potential impacts to stormwater runoff to a less than significant level. The Project would have a less than significant impact under this issue. No further mitigation is required.

b. Less Than Significant Impact w/Mitigation Incorporated - Presently the area is under the jurisdiction of the Mojave Water Agency (MWA) by the existing four-(4) contracts is entitled to 85,800 acre-feet cumulative per year of supplemental water from the California Water Project (CWP or California Aqueduct), increasing another 4,000 acre-feet in January 2020 for future

growth. The original 50,800 acre-feet entitlement of the CWP has been available for 50+ years and the MWA has purchased additional water transfers (first of several from Dudley Ranch) on March 26, 1996, which increased the entitlement by 25,000 acre-feet yearly. Only 7,257 acrefeet per year has been committed to the Morongo Basin, leaving 82,543 acre-feet available to provide "Supplement/Make Up Water" under MWA's jurisdiction in 2020. The water demand for the project is significantly less than a residential development as allowed by the underlying zoning. However, the continued growth and potable water demand for the HCSD and as such may have to purchase "Make Up Water" if the district exceeds its cumulative "Water Rights" and associated "Free Production Allowance" as stipulated in the Final Judgment to the Mojave Basin Area Adjudication entered January 10, 1996.

Further, any new construction shall employ all water conservation measures outlined in the State Appliance Efficiency Standards as enforced by the County Public Health as part of obtaining permits for the development in addition to the water conservation measures required, which includes drought tolerant landscaping, further reducing the water demand of new residential and commercial development that occurs as a result of this proposal. The proposed new wells are each forecast to increase groundwater extraction, as required by the needs of HCSD. These wells are not designed to interfere with any private wells located within the same aquifer. However, since pumping tests will not be conducted until the proposed well is completed, the following mitigation measure shall be implemented by HCSD to ensure that other wells within this local aquifer do not incur a significant adverse impact from pumping the proposed well.

Mitigation Measure:

HYD 4.HCSD shall conduct a pump test of the new well and determine whether any other wells are located within the cone of depression once the well reaches equilibrium. If any private wells are adversely impacted by future groundwater extractions from the proposed well, HCSD shall offset this impact through provision of water service; or adjusting the flow rates or hours of operation to mitigate adverse impacts.

c. **Less Than Significant Impact w/Mitigation Incorporated** - The project will not substantially alter the existing drainage pattern of the site or area as there will be minimal earth-moving for the project, and there are no existing streams or rivers that traverse the area. No public storm drain system currently exists in the vicinity of the project.

Counties require implementation of a set of BMPs to control discharges that surface runoff with pollutants could cause that may cause a significant adverse impact to surface water quality. Storm water pollution prevention BMPs will be incorporated to control pollution from construction activities in the vicinity of the project site. These measures, such as berms, coil rolls, silt fencing, detention basins, etc., are mandatory, as are the measures for ongoing non-point source pollution controls implemented by the local jurisdictions once the project is completed. The mandatory BMPs applied in conjunction with Mitigation Measures HAZ-1, and HYD-3 in conjunction with measure HYD-5 below, are deemed sufficient to reduce potential surface water quality impacts to a less than significant level. This is because the stormwater discharge will be treated to the point that the discharge will meet requirements for stormwater runoff from construction sites.

Mitigation Measure:

HYD 5.HCSD and construction contractor shall select best management practices applicable to the project site and activities on the site to achieve a reduction in pollutants to the maximum extent practicable, both during and following development of the proposed municipal-supply water well and associated pipeline, and to control urban runoff after the Project is constructed and the well (if approved for operation post well testing) is in operation.

Adequate drainage facilities, if needed will be developed by this Project to accommodate future drainage flows, and will therefore result in a less than significant impact. Based on the data outlined above, this Project will not substantially alter the existing drainage pattern of the site or area; result in substantial erosion or siltation onsite or offsite; substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite or offsite; or, 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. Therefore, with the mitigation measure identified above, impacts under these issues are considered less than significant. No further mitigation is required.

i.-iv. Less Than Significant Impact w/Mitigation Incorporated - See "c" above. The project is located within a special flood hazard area inundated by a 100-year flood; and is located within Zone A. Given that the two wells located on the site that may experience flooding would encompass a modest portion of the site above ground (a 10' x 10' concrete pad is anticipated to be required for each new well), the inclusion of these wells at the site is not anticipated to redirect or impede flood flows.

Furthermore, the location is outside of roadways, and drainage will be managed within the site. Therefore, the proposed project would have a less than significant potential to substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would impede or redirect flows. No mitigation is required.

- d. **Less Than Significant Impact** The project will not expose people or structures to a significant risk of loss, injury or death involving flooding as no flood hazards traverse the proposed well locations nor is the site subject to inundation by seiche, tsunami, or mudflow as there is no evidence suggesting potential for these hazards based upon types of localized soils and depth to the water table.
- e. **Less Than Significant Impact** The project will not conflict or obstruct implementation of a water quality control plan or sustainable groundwater plan. Presently the area is under the jurisdiction of the Mojave Water Agency (MWA) which has numerous approved water resource management plans; Ground Water Management Plan (GWMP), Salt and Nutrient Management Plan (SNMP), Mojave Integrated Regional Water Management Plan (IRWMP), and Mojave Urban Water Management Plan (UWMP).

3.11 Land Use and Planning

	/ssues		Less than Significant w/Mitigation Incorporated	Less than Significant	No Impact
	LAND USE AND PLANNING - Would the project:				
a)	Physically divide an established community? (4)	П		П	\bowtie

	Cause a significant environmental impact due to a conflict with any		
b)	land use plan, policy, or regulation adopted for the purpose of		
,	avoiding or mitigating an environmental effect? (1; 2; 27)		\boxtimes

LAND USE AND PLANNING

Explanations:

- a. **No Impact** The project will not disrupt or divide an established community since the project does not involve construction of new structures that would cause any physical division of communities. Further, the proposed project occurs within and supports existing land use designations, no potential exists for the proposed project to physically divide an existing community. No impact will result, and no mitigation is required.
- b. **No Impact** The project will not conflict with the General Plan's Land Use Plan or the Zoning Ordinance since water production facilities are zone independent because they are needed to support all types of land uses.

3.12 Mineral Resources

	Issues	Potentially Significant Impact	Less than Significant w/Mitigation Incorporated	Less than Significant	No Impact
	MINERAL RESOURCES - Would the project:				
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? (3)				\boxtimes
b)	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? (3)				\boxtimes

MINERAL RESOURCES

Naturally occurring mineral resources within the County include sand, gravel, or stone deposits that are suitable as sources of concrete aggregate, located primarily along the Mojave River.

Explanations:

a. & b. No Impact - The project will not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan, because there are no identified locally important mineral resources on the project site. The underlying soils in the area could be recovered, but the project site is disturbed historical agricultural property which has five (5) water production wells on or abutting the site. Finally, the area has not been identified as a locally important mineral resource, and the project will have no impact.

3.13 Noise

	Issues	Potentially Significant Impact	Less than Significant w/Mitigation Incorporated	Less than Significant	No Impact
	NOISE - Would the project:				
a)	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the		\boxtimes		

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	local general plan or noise ordinance, or applicable agencies? (1; 14; 23)	standards of other			
b)	Generation of excessive ground borne vibration or	ground borne noise levels?		\boxtimes	
c)	For a project located within the vicinity of a private a use plan or, where such a plan has not been adopt public airport or public use airport, would the project area to excessive poise level	ed, within two miles of a t expose people residing or	П	lacktriangledown	

NOISE

Noise is generally described as unwanted sound. Once the wells are developed and tested as a production wells, the proposed wells will be above surface pumps. Mitigation is provided below to ensure that, if the pump exceeds the County's standards for noise levels at the nearest sensitive receptor, it will be housed in a noise minimizing structure. Sensitive receptors in the area include churches, residents, medical facilities, and schools, all of which are greater than 0.2± miles from the proposed well locations. It is noted that OHV use the project Site and adjacent properties for recreational purpose.

The unit of sound pressure ratio to the faintest sound detectable to a person with normal hearing is called a decibel (dB). Sound or noise can vary in intensity by over one million times within the range of human hearing. A logarithmic loudness scale, similar to the Richter scale for earthquake magnitude, is therefore used to keep sound intensity numbers at a convenient and manageable level. The human ear is not equally sensitive to all sound frequencies within the entire spectrum. Noise levels at maximum human sensitivity from around 500 to 2,000 cycles per second are factored more heavily into sound descriptions in a process called "A-weighting," written as "dBA."

Equivalent Sound Level (Leq) is a time-averaged sound level; a single-number value that expresses the time-varying sound level for the specified period as though it were a constant sound level with the same total sound energy as the time- varying level. Its unit is the decibel (dB). The most common averaging period for Leq is hourly.

Because community receptors are more sensitive to unwanted noise intrusion during more sensitive evening and nighttime hours, state law requires that an artificial dBA (A-weighted decibel) increment be added to quiet time noise levels. The State of California has established guidelines for acceptable community noise levels that are based on the Community Noise Equivalent Level (CNEL) rating scale (a 24-hour integrated noise measurement scale). The guidelines rank noise land use compatibility in terms of "normally acceptable," "conditionally acceptable," and "clearly unacceptable" noise levels for various land use types. The State Guidelines, Land Use Compatibility for Community Noise Exposure, single-family homes are "normally acceptable" in exterior noise environments up to 60 dB CNEL and "conditionally acceptable" up to 70 dB CNEL based on this scale. Multiple family residential uses are "normally acceptable" up to 65 dB CNEL and "conditionally acceptable" up to 70 CNEL. Schools, libraries, and churches are "normally acceptable" up to 70 dB CNEL, as are office buildings and business, commercial and professional uses with some structural noise attenuation.

Explanations

a. Less Than Significant Impact w/Mitigation Incorporated - The proposed project site is located in a low background noise environments (except it is noted that OHV use the project Site and adjacent properties for recreational purpose). Local sources of noise include minimal traffic along Helendale Road and Shadow Mountain Road. Traffic is relatively minimal because the majority of traffic is to and from only the Silver Lakes community. Based on the limited traffic, background noise is estimated at below 45 dBA over a 24-hour period using the Community Noise Equivalent Level (CNEL). Implementation of the proposed project will generate some noise. Generally, well drilling equipment can generate noise levels of about 70 to 90 dBA at a distance of 50 feet from the equipment. Drilling will be accomplished by using a reverse rotary drill unit and may occur over

a 24-hour period until the well is completed to the design depth for about 3± weeks. Stationary source noise diminishes at a rate of about 6 dB for each doubling of the distance from the source. This means that periodic construction noise levels at the nearest receptor can be about 43 to 63 dBA. Therefore, it has no potential that well drilling will exceed the County's noise standard of 65 dBA at the exterior of the nearest receptors. Regardless, this increase in noise levels will be short term drilling per well. The increased noise levels will not be severe enough to pose a health or hearing hazard, but could be considered a short- term nuisance. However, mitigation is provided below to ensure that a noise wall is constructed during the period to minimize noise levels at nearby sensitive receptors; furthermore, should any residents find that the well drilling noise levels are a nuisance, a program will be created to minimize the noise further.

The connection pipelines that will be required will be constructed at a similar distance to the well locations, and will be constructed concurrent with the determination that wells are viable to produce drinking water that then can be connected to HCSD's service area. Should wells be viable, pipeline construction will be limited to daylight hours to prevent significant impacts during the short (no more than one or two week) construction period for each.

Temporary construction noise is exempt from the County Noise Performance Standards between 7:00 a.m. and 7:00 p.m., except Sundays and Federal holidays. The proposed project would be constructed in compliance with the County's Noise Performance Standards, and therefore construction of the project would be less than significant. However, to minimize the noise generated on the site to the extent feasible, the following mitigation measures shall be implemented:

Mitigation Measures:

- NOI 1 Noise measures shall be implemented to reduce noise levels to the greatest extent feasible (at or below 65 dBA). Measures may include portable noise barriers, scheduling specific construction activities to avoid conflict with adjacent sensitive receptors, or any other means by which to accomplish this noise minimization.
- NOI 2 All construction equipment be operated with mandated noise control equipment (mufflers or silencers). Enforcement will be accomplished by random field inspections by Applicant personnel during construction activities.
- NOI 3 HCSD will establish a noise complaint/response program and will respond to any noise complaints received for this project by measuring noise levels at the affected receptor. If the noise level exceeds 60 dBA exterior or 45 dBA interior between the hours of 7 PM and 7 AM on any day except Sunday or a Federal holiday, or between the hours of 8 PM and 9 AM on Sunday or a Federal holiday at the receptor, the Applicant will implement adequate measures to reduce noise levels to the greatest extent feasible, including portable noise barriers at the project site or at affected residences, offer temporary relocation to affected residences, or scheduling specific construction activities to avoid conflict with adjacent sensitive receptors.
- NOI 4 Construction staging areas shall be located as far from adjacent sensitive receptor locations as possible, for example on the north- or south- west corners of the project site.

This noise can be mitigated, as outlined in the mitigation measure below by constructing a wooden or concrete housing unit to reduce operational noise levels to a less than significant impact, should the noise levels from the well pump exceed County of San Bernardino standards. The pipeline will not generate any noise once constructed. Additionally, to reduce potential long-term noise effects from the well pump to the greatest extent feasible, the mitigation measure presented below will be implemented.

Mitigation Measure:

NOI 5 Well pump noise levels to be limited to 50 dB(A) or below at the exterior of the nearest sensitive noise receptor. A manner in which this may be accomplished is by installing surface well housing, housed in concrete block structure that attenuates noise to meet this performance standard. Alternative design criteria may be accomplished to reduce noise impacts. The aforementioned or other noise reducing measures shall be implemented should HCSD be unable to demonstrate that noise levels are limited to 50 dBA at the nearest sensitive receptor.

Therefore, through the implementation of the mitigation measures identified above, neither operation nor construction of the proposed project would violate noise standards outlined in the San Bernardino County Development Code. Impacts under this issue are considered less than significant with mitigation incorporated.

- b. **Less Than Significant Impact** The project is not anticipated to generate excessive ground borne vibration or noise levels, as described in section a. above. The surrounding properties are disturbed vacant desert, Silver Lakes community, Mojave River, and historically disturbed agricultural uses. However, due to the extended distance to sensitive receptors 1,100 Feet (0.2 miles), the exposure of persons to noise levels in excess of standards is less than significant.
- c. **No Impact** The project site is not located in an airport land use plan or within the vicinity of any public or private airstrip that would be affected.

3.14 Population and Housing

	Issues	Potentially Significant Impact	Less than Significant w/Mitigation Incorporated	Less than Significant	No Impact
	POPULATION AND HOUSING - Would the project:				
a)	Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)? (4; 6; 11; 26; 27)				
b)	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? (4; 6)				\boxtimes

POPULATION AND HOUSE

Explanations:

- a. **No Impact** The proposed project will not directly increase the population within Helendale as the current jobs-housing balance demonstrates a lack of jobs for the current population, therefore the population of Helendale will not increase as a result of the proposed project.
- b. No Impact The proposed project will not displace substantial numbers of existing people or housing as no existing housing or areas currently designated for housing will be removed or reduced or divide an existing neighborhood.

3.15 Public Services

Issues	Potentially Significant Impact	Less than Significant w/Mitigation Incorporated	Less than Significant	No Impact
PUBLIC SERVICES. 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 accepta- times or other performance objectives for any of the public serv		
a)	Fire Protection?		\boxtimes
b)	Police Protection?		\boxtimes
c)	Schools?		\boxtimes
d)	Parks?		\boxtimes
e)	Other Public Facilities?		\boxtimes

PUBLIC SERVICES

Explanations:

a.-e. **Less Than Significant/No Impact** - The proposed expansion of an existing well field project will not result in an increase in public services.

3.16 Recreation

	Issues	Potentially Significant Impact	Less than Significant w/Mitigation Incorporated	Less than Significant	No Impact
	RECREATION				
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?				\boxtimes
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?				\boxtimes

RECREATION

The project is the expansion of an existing well field.

Explanations:

a.&b. **No Impact** - The proposed project will not increase the use of existing neighborhood or regional parks or other recreational facilities because it will not cause an increase in population in the Helendale area.

3.17 Transportation

	Issues	Potentially Significant Impact	Less than Significant w/Mitigation Incorporated	Less than Significant	No Impact
	TRANSPORTATION - Would the project result in:				
a)	Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle lanes and pedestrian facilities? (11; 18)		\boxtimes		
b)	Conflict or be inconsistent with CEQA Guidelines Section 15064.3 Subdivision (b)? (11; 20)				

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c)	Substantially increase hazards due to geometric design fecurves or dangerous intersections) or incompatible uses (equipment)? (11; 18)	\ 3 / I	\boxtimes	
d)	Result in inadequate emergency access? (4; 24)			

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TRANSPORTATION

Explanations:

- **Less Than Significant Impact w/Mitigation Incorporated** The proposed well field development a. project is located within the community of Helendale in San Bernardino County. Construction of the wells will be limited to within the boundaries of the project site, though they will require extension of existing water lines that currently have connection to HCSD's existing potable water distribution system, which will require a short period of construction vehicles within the corresponding roadways adjacent to the project site. The roadways within which construction will occur are as follows: Helendale and/or Shadow Mountain roads. In the short term, construction of the proposed wells and pipeline will result in the generation of around 15-20 additional roundtrips per day on the adjacent roadways by construction personnel and the removal of any graded material and delivery of well construction materials. No new roads are required to construct or operate this Project. However, construction activity within existing roadways is necessary to complete construction activities for the new well(s), for a period of approximately one to two weeks per well connection. No temporary roadway closure will be required though one lane may require closure at any given time throughout construction; given the temporary nature of the construction proposed the proposed project is not anticipated to conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. However, the proposed project shall implement the following mitigation measure to ensure that disturbances within public roadways will be repaired to at existing or better conditions.
 - TRAN 1 The construction contractor will provide adequate traffic management resources, as determined by the HCSD. If needed, HCSD shall require a construction traffic management plan for work in public roads that complies with the Work Area Traffic Control Handbook, or other applicable standard, to provide adequate traffic control and safety during excavation activities. The traffic management plan shall be prepared and approved by the HCSD prior to initiation of excavation or pipeline construction. At a minimum this plan shall include how to minimize the amount of time spent on construction activities; how to minimize disruption of vehicle and alternative modes of transport traffic at all times, but particularly during periods of high traffic volumes; how to maintain safe traffic flow on local streets affected by construction at all times, including through the use of adequate signage, protective devices, flag persons or police assistance to ensure that traffic can flow adequately during construction; the identification of alternative routes that can meet the traffic flow requirements of a specific area, including communication (signs, webpages, etc.) with drivers and neighborhoods where construction activities will occur; and at the end of each construction day roadways shall be prepared for continued utilization without any significant roadway hazards remaining.
 - TRAN 2 HCSD shall require all disturbances to public roadways be repaired in a manner that complies with the Standard Specifications for Public Works Construction (green book) or other applicable Local Agency standard design requirements.

The operation phase of the proposed project would require minimal new trips to the well development site on a maintenance basis only, and the traffic on adjacent roadways as a result of well operations would be minimal due to remote operational capabilities. As such,

operation of the proposed project would not conflict with a program, plan, ordinance, or policy addressing the applicable circulation systems; including transit, roadway, bicycle, and pedestrian facilities. Therefore, with implementation of the above mitigation measure, implementation of the Project would have a less than significant impact under this issue.

- b. Less Than Significant Impact The proposed project would install new wells and connecting existing water lines and associated valves within Helendale and Shadow Mountain roads. The Local Agency does not have thresholds for vehicle miles travelled; however, the proposed project will not require a substantial amount of operational traffic beyond any maintenance trips to the well site. Construction of the proposed project will require about 15-20 trips to and from the well site each day as a result of employee and construction related trips. Given that these trips are temporary, and are not anticipated to exceed a 45 miles round trip per day during the 5 week period required to complete construction at each construction of the wells; however, additional back-up wells may be developed, and as such, construction may require up to one year), construction related vehicle miles traveled impacts are considered less than significant. As such, development of the project is not anticipated to result in significant impact related to vehicle miles travelled, and thus would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b). Impacts under this issue are considered less than significant.
- c. Less Than Significant Impact w/Mitigation Incorporated The proposed project would not substantially increase hazards due to a design feature or incompatible uses. With the exception of the aforementioned trip generation during the construction phase and the installation of the connection pipeline from the wells to HCSD's distribution system located adjacent to the site the proposed project will not alter any adjacent roadways. No planned construction within the adjacent roadway because existing water lines and valving has already been constructed. As stated under issue a. above, with the implementation of mitigation measures TRAN-1 and TRAN-2 below, which require implementation of a construction traffic management plan, if needed, any potential increase in hazards due to design features or incompatible use will be considered less than significant in the short term. In the long term, no impacts to any hazards or incompatible uses in existing roadways are anticipated because water pipeline have already been installed, regardless the roadway will be returned to its original condition. Thus, any potential increase in hazards due to design features or incompatible use will be considered less than significant. No mitigation is required.
- a. e. Less Than Significant Impact w/Mitigation Incorporated Please refer to the discussion under issue a. above. The proposed project will not require any closure of any lanes within Helendale and Shadow Mountain Roads and water line and well connections have been installed. Due to the proposed well locations, no potential exists for short-term hazards or constraints on both normal and emergency access within the affected area. There are no emergency access roadways located within the project footprint. Regardless, any traffic impacts are reduced by the implementation of mitigation measures TRAN-1 and TRAN-2 which will ensure that impacts are reduced to a level of less than significant. No additional mitigation is required.

3.18 Tribal Cultural Resources

	Issues	Potentially Significant Impact	Less than Significant w/Mitigation Incorporated	Less than Significant	No Impact
TRIBAL CULTURAL RESOURCES					

		Planning Initial Study elendale Road, Helendale			Page 45 er 2020
a)	tribal either terms	d the project cause a substantial adverse change in the significance of a cultural resource, defined in Public Resource Code Section 21074 as a site, feature, place, cultural landscape that is geographically defined in of the size and scope of the landscape, sacred place, or object with all value to a California Native American tribe, and that is:	\boxtimes		
	i)	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			\boxtimes
	ii)	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 Resource Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		\boxtimes	

TRIBAL CULTURAL RESOURCES

As noted in the Cultural Resources Section explanation, the project area has significant disturbance from historical agricultural use, which disturbed the ground to an estimated depth of 18+/- inches and disturbing any resources near the surface. A review of projects submitted to the County of San Bernardino in the surrounding area, identified two projects located near the project, and are discussed under the Cultural Resources Section.

Explanations:

A request for Tribal Consultation List and Sacred Lands File Search has been submitted to the Native American Heritage Commission. Once that information is received, consultation with the applicable tribes will be undertaken, as applicable.

a. & ii. Less Than Significant Impact w/Mitigation Incorporated – Based on the above information and analysis, it is not anticipated the project will cause substantial adverse change in significant tribal cultural resources. Mitigation measures are included to address the discovery of any resources during construction activities.

Mitigation Measures:

- TRI 1. In the event that Tribal cultural resources are discovered during the project earth moving activities, all work in the immediate vicinity of the find shall cease and a qualified archaeologist and appropriate local Tribe or Band shall assess the significance of such resources and shall meet and confer regarding the mitigation for such resources. The Helendale CSD cedes to the San Manuel Band of Mission Indians (SMBMI) for ultimate determination and all tribal resources to SMBMI. SMBMI is a non-collection tribe and all resources shall be reburied on-site at a location that does not impact future well locations and additionally complies with the provisions of CEQA with respect to archaeological resources and shall take into account the religious beliefs, customs and practices of the Tribe or Band.
- TRI 2. If significant Tribal cultural resources are discovered, for which a Treatment Plan must be prepared, HCSD's qualified archaeologist shall contact the appropriate Tribe or Band for collaboration on Plan development.

- TRI 3. If requested by a Tribe or Band, HCSD's qualified archaeologist shall, in good faith, consult with Tribal representatives on the discovery and its disposition (e.g. avoidance, preservation, return of artifacts to tribe, etc.).
- TRI 4. All earthmoving work in the immediate vicinity shall cease and County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 if human remains are encountered. If the remains are determined to be Native American, the State Native American Heritage Commission (NAHC) shall be contacted to determine the Most Likely Descendant (MLD). The MLD shall be contacted to make a determination regarding disposition of the remains. Work shall not resume until such time as the site has been cleared by the County Coroner or qualified archaeologist or Tribal representative. Tribal representative(s) o the lead Tribal Representative, currently designed as SMBMI and a more detailed criteria and specifically a buffer zone
- i. **No Impact** The site does not meet the criteria to be listed or eligible for listing in the California Register of Historical Resources or in a local register. Therefore, there is no impact.

3.19 Utilities and Service Systems

	Issues	Potentially Significant Impact	Less than Significant w/Mitigation Incorporated	Less than Significant	No Impact
	UTILITIES AND SERVICE SYSTEMS - Would the project:				
a)	Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? (3; 15; 25)			\boxtimes	
b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years? (1; 3; 17; 22)			\boxtimes	
c)	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? (3; 9; 25)			\boxtimes	
d)	Generate solid waste in excess of State or local standards or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? (3; 25)			\boxtimes	
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? (3)				

UTILITIES AND SERVICE SYSTEMS

Explanations:

a. **Less Than Significant Impact** - The proposed project is the expansion of an existing well field to serve the Helendale area. No wastewater will be generated by the project, either in the short or long term. Current wells located on and abutting the Site already use existing utilities, however capacity and distribution improvements may be needed to meet new peak demand scenarios, updated, or current expansion plans expedited if deemed necessary as a result of cumulative projects. However, the proposal itself will not immediately require the construction or expansion of utility facilities. Therefore, since the project will not directly require the

- construction or expansion of water or electrical lines, or communication facilities for remote operational purposes, this project will have a less than significant impact.
- b. Less Than Significant Impact Presently the area under the jurisdiction of the Mojave Water Agency (MWA) by the existing four-(4) contracts is entitled to 85,800 acre-feet cumulative per year of supplemental water from the California Water Project (CWP or California Aqueduct), increasing another 4,000 acre-feet in January 2020. The original 50,800 acre-feet entitlement of the CWP has been available for 50+ years and the MWA has purchased additional water transfers (first of several from Dudley Ranch) on March 26, 1996, which increased the entitlement by 25,000 acre-feet yearly. Only 7,257 acre-feet per year has been committed to the Morongo Basin, leaving 82,543 acre-feet available to provide "Supplement/Make Up Water" under MWA's jurisdiction in 2020. The water demand for the project will not increase.
- c. Less Than Significant Impact The well operation will not require installation of restroom facilities; construction may require portable toilets that will be handled by the provider of such facilities. As such, given that the well operation will not require any new connection to wastewater treatment services, it is not anticipated that the Project would 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. No impacts under this issue are anticipated.
- Less Than Significant Impact Other than a small amount of construction wastes (concrete, wood, etc.) and a small amount of waste associated with operating the proposed wells, the Project will not generate a substantial amount of solid wastes and will not adversely affect the existing solid waste disposal system. Once in operation, the only above-ground features of the Project will be the developed well. Construction and demolition (C & D) waste will be recycled to the maximum extent feasible in accordance with the California Green Building Code, and any residual materials will be delivered to one of several C & D disposal sites in the area surrounding the project site. Additionally, any hazardous materials collected on the project site during either construction of the Project will be transported and disposed of by a permitted and licensed hazardous materials service provider. The Project will not conflict with any state, federal, or local regulations regarding solid waste. Solid waste will be disposed of in accordance with existing regulations at an existing licensed landfill-such as the Victorville Sanitary Landfill -with adequate capacity to handle the waste. According to the CalRecycle and San Bernardino County Solid Waste Management-which serves the community of Helendalethe maximum permitted capacity of Victorville Sanitary Landfill is 83,200,000 Cubic Yards (CY), while its remaining capacity is 81,510,000 CY; the Victorville Sanitary Landfill can accept 3,000 tons per day. Thus, there is adequate solid waste disposal capacity for solid waste generated as a result of implementation of the proposed Project both in the short term and long term. These impacts are considered less than significant. No additional mitigation is required.

3.20 Wildfire

	Issues	Potentially Significant Impact	Less than Significant w/Mitigation Incorporated	Less than Significant	No Impact	
	WILDFIRE: If located in or near state responsibility areas or lands classified as very-high fire hazard severity zones, would be project:					
a)	Substantially impair an adopted emergency response plan or emergency evacuation plan?				\boxtimes	
b)	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or other uncontrolled spread of a wildfire?				\boxtimes	
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 I temporary or ongoing impacts to the environment?				\boxtimes	
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?				\boxtimes	

WILDFIRE

Explanations:

a. – d. The project is not located within or near a state responsibility area according to the Fire and Resource Assessment Program (FRAP) map. Additionally, the Project Site has a low level of mass-loading of native and invasive vegetation for wildland fire potential to occur on the Site.

3.21 Mandatory Findings of Significance

	Issues	Potentially Significant Impact	Less than Significant w/Mitigation Incorporated	Less than Significant	No Impact
	MANDATORY FINDINGS OF SIGNIFICANCE:				
a)	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? (1; 3; 12)		\boxtimes		
b)	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)? (20; 25)			\boxtimes	
c)	Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly? (1; 2; 27)				

MANDATORY FINDINGS OF SIGNIFICANCE

Explanations:

- a. Less Than Significant Impact W/Mitigation The Project has no potential to cause a significant impact any biological or cultural resources. The project has been identified as having no potential- with the implementation of mitigation measures-to degrade the quality of the natural environment, substantially reduce 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, or reduce the number or restrict the range of a rare or endangered plant or animal. The project site is historical agricultural property, currently with three (3) water production wells located on-site. The remainder of the site contains a mixture of re-grown native vegetation and invasive species. No sensitive natural biological habitat exists within the proposed well sites; however, mitigation is required to protect riparian trees, burrowing owls, nesting birds, and other sensitive species. The cultural resources evaluations of nearby projects indicates there is a low probability of cultural resources, no impacts are anticipated. To ensure that any accidentally exposed subsurface cultural resources are properly handled, contingency mitigation measures will be implemented. With incorporation of Project mitigation measures all biology and cultural resource impacts will be reduced to a less than significant level.
- b. Less Than Significant Impact The proposed project is the expansion of an existing well field, on property zoned for residential development. Therefore, the impacts of the project are substantially less than those considered under the San Bernardino County General Plan included an environmental impact report (EIR), which incorporates approved projects under construction and their impacts to the Community as a whole. While the subject site was not individually studied, the impacts of all existing zoned and existing uses were included, and appropriate mitigation and implementation measures are included in the General Plan. Therefore, the proposed project impacts are individually limited, but cumulatively considerably less than significant.
- c. Less Than Significant Impact W/Mitigation The Project will achieve long-term community goals by providing reliable potable water from the new wells. The short-term impacts associated with the Project, which are mainly construction-related impacts, are less than significant with mitigation, and the proposed Project is compatible with long-term environmental protection. The issues of Air Quality, Geology and Soils, Hazards and Hazardous Materials, and Noise require the implementation of mitigation measures to reduce human impacts to a less than significant level. All other environmental issues were found to have no significant impacts on humans without implementation of mitigation. The potential for direct human effects from implementing the proposed project have been determined to be less than significant.

3.22 Earlier Analyses

Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, one or more effects have been adequately analyzed in an earlier EIR or negative declaration. Section 15063 (c)(3)(D). In this case a discussion identifies the following:

- a) **Earlier analyses used**. Earlier analyses are identified and stated where they are available for review.
- b) **Impacts adequately addressed**. Effects from the above checklist that were identified to be within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards are noted with a statement whether such effects were addressed by mitigation measures based on the earlier analysis.
- c) **Mitigation measures**. For effects that are "Less than Significant with Mitigation Incorporated", describe the mitigation measures which are incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project are described.

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Authority: Public Resources Code Sections 21083 and 21087.

Reference: Public Resources Code Sections 21080(c), 21080.1, 21083, 21083.3, 21093, 21094, 21151; Sundstrum v. County of Mendocino, 202 CalApp 3d 296 (1988); Leonoff v. Monterey Board of Supervisors, 222 CalApp 3d 1337 (1990.

Section 4.0 Conclusions

4.1 Findings

The Initial Study determined that the proposed project is not expected to have significant adverse environmental impacts. The following findings can be made regarding the Mandatory Findings of Significance set forth in Section 15065 of the CEQA Guidelines based on the results of this Initial Study:

- The proposed project, with the proposed mitigation measures, will not have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare or threatened species or eliminate important examples of the major periods of California history or prehistory.
- The proposed project will not have impacts that are individually limited, nor cumulatively considerable.
- The proposed project, with proposed mitigation measures, will not have environmental effects which will cause substantially adverse effects on human beings, either directly or indirectly.

4.2 Mitigation Monitoring

In addition, pursuant to Section 21081(a) of the Public Resources Code, findings must be adopted by the decision-maker coincidental to the approval of a Mitigated Negative Declaration. These findings shall be incorporated as part of the decision-maker's findings of fact, in response to AB-3180 and in compliance with the requirements of the Public Resources Code. In accordance with the requirements of Section 21081(a) and 21081.6 of the Public Resources Code, the City of Adelanto can make the following additional findings: a mitigation monitoring and reporting program will be required and is included below.

A completed and signed checklist for each measure indicates that a measure has been implemented and fulfills the monitoring requirements with respect to Public Resources Code Section 21081.6.

MITIGATION MONITORING AND REPORTING PROGRAM FOR HCSD WELL FIELD PROJECT

	TOR HOSD WELL FIELD I ROJECT							
	Mitigation Measure	Responsible Party	Timing of Compliance	Signature and Date of Compliance				
1	Air Quality Measures							
1.	Dust Control Plan (Ref. Mitigated Negative Declaration Measure AIR 1)	Project Developer	Prior to project construction activities					
2.	Signage (Ref. Mitigated Negative Declaration Measure AIR 2)	Project Developer	Prior to project construction activities					
3.	Watering (Ref. Mitigated Negative Declaration Measure AIR 3)	Project Construction Superintendent	Prior to and during all construction activities until final construction					
4.	Fencing (Ref. Mitigated Negative Declaration Measure AIR 4)	Project Construction Superintendent	Prior to and during all construction activities until final construction					
5.	Maintenance and access roads and parking areas (Ref. Mitigated Negative Declaration Measure AIR 5)	Project Construction Superintendent	Prior to and during all construction activities until final construction					
E	Biological Resource Measures							
6.	Riparian tree protection (Ref. Mitigated Negative Declaration Measure BIO 1)	Project Developer & Project Biologist	Prior to project construction activities					
7.	Preconstruction Survey – Desert kit fox and American badger (Ref. Mitigated Negative Declaration Measure BIO 2)	Project Developer & Project Biologist	Prior to project construction activities					
8.	Preconstruction Survey – Burrowing owl (Ref. Mitigated Negative Declaration Measure BIO 3)	Project Developer & Project Biologist	Prior to project construction activities					

Mitig	gation Measure	Responsible Party	Timing of Compliance	Signature and Date of Compliance
9.	Active nest survey (Ref. Mitigated Negative Declaration Measure BIO 4)	Project Developer & Project Biologist	Prior to project construction activities	
10.	Sensitive species found during subsequent surveys (Ref. Mitigated Negative Declaration Measure BIO 5)	Project Developer & Project Biologist	Prior to project construction activities	
Cı	ultural Resource Measures			
12.	Tribal cultural resources found during earth moving activities (Ref. Mitigated Negative Declaration Measure CUL 1)	Project Developer & Project Archaeologist	Prior to and during project construction activities	
13.	Treatment Plan for significant Tribal cultural resources (Ref. Mitigated Negative Declaration Measure CUL 2)	Project Developer & Project Archaeologist	Prior to and during project construction activities	
14.	Tribal consultation on discovery and disposition (Ref. Mitigated Negative Declaration Measure CUL 3)	Project Developer & Project Archaeologist	Prior to and during project construction activities	
15.	Human remains found during earthmoving (Ref. Mitigated Negative Declaration Measure CUL 4)	Project Developer	Prior to and during project construction activities	
	Mitigation Measure	Responsible Party	Timing of Compliance	Signature and Date of Compliance
Ge	eology & Soils Measures			

16.	Storage of backfill material (Ref. Mitigated Negative Declaration Measure GEO 1)	Project Developer & Project Contractor	Prior to project construction activities	
17.	Excavated areas (Ref. Mitigated Negative Declaration Measure GEO 2)	Project Developer & Project Contractor	Prior to and during project construction activities	
18.	Exposed, disturbed soil (Ref. Mitigated Negative Declaration Measure GEO 3)	Project Developer & Project Contractor	Prior to and during project construction activities	
19.	Trenching (Ref. Mitigated Negative Declaration Measure GEO 4)	Project Developer & Project Contractor	Prior to and during project construction activities	
20.	Discharge of surface waters BMPs (Ref. Mitigated Negative Declaration Measure GEO 5)	Project Developer & Project Contractor	Prior to and during project construction activities	
21.	Fossils found during development (Ref. Mitigated Negative Declaration Measure GEO 6)	Project Developer & Project Paleontologist	Prior to and during project construction activities	
На	zards and Hazardous Materials Measures			
22.	Spills or leakage of petroleum products (Ref. Mitigated Negative Declaration Measure HAZ 1)	Project Developer & Project Contractor	Prior to and during project construction activities	
Ну	drology & Water Quality Measures			
23.	Groundwater production testing (Ref. Mitigated Negative Declaration Measure HYD 1)	Project Developer & Project Contractor	Prior to discharge	

	Mitigation Measure	Responsible Party	Timing of Compliance	Signature and Date of Compliance
24.	Drilling Plan (Ref. Mitigated Negative Declaration Measure HYD 2)	Project Developer & Project Contractor	Prior to construction activities	
25.	SWPPP (Ref. Mitigated Negative Declaration Measure HYD 3)	Project Developer & Project Engineer	Prior to project construction activities	
26.	Pump Test (Ref. Mitigated Negative Declaration Measure HYD 4)	Project Developer & Project Contractor	Prior to permanent well operation	
27.	Reduction in pollutants (Ref. Mitigated Negative Declaration Measure HYD 5)	Project Developer & Project Contractor	Prior to permanent well operation	
No	pise Measures			
28.	Reduction of noise levels (Ref. Mitigated Negative Declaration Measure NOI 1)	Project Developer & Project Contractor	Prior to and during project construction activities	
29.	Noise control equipment (Ref. Mitigated Negative Declaration Measure NOI 2)	Project Developer & Project Contractor	Prior to and during project construction activities	
30.	Noise complaint/response program (Ref. Mitigated Negative Declaration Measure NOI 3)	Project Developer	Prior to project construction activities	
31.	Construction staging area locations (Ref. Mitigated Negative Declaration Measure NOI 4)	Project Developer & Project Contractor	Prior to and during construction activities	
32.	Well pump noise level reduction (Ref. Mitigated Negative Declaration Measure NOI 5)	Project Developer & Project Contractor	Prior to, during and after construction activities	
Tra	ansportation Measures			
33.	Traffic management resources (Ref. Mitigated Negative Declaration Measure TRAN 1)	Project Developer & Project Contractor	Prior to and during project construction activities	

	Mitigation Measure	Responsible Party	Timing of Compliance	Signature and Date of Compliance
34.	Disturbances to public roadways (Ref. Mitigated Negative Declaration Measure TRAN 2)	Project Developer & Project Contractor	During and after project construction activities	
Tr	ibal Cultural Resources Measures			
35.	Tribal cultural resources found during earth moving activities (Ref. Mitigated Negative Declaration Measure TRI 1)	Project Developer & Project Archaeologist	Prior to and during project construction activities	
36.	Treatment Plan for significant Tribal cultural resources (Ref. Mitigated Negative Declaration Measure TRI 2)	Project Developer & Project Archaeologist	Prior to and during project construction activities	
37.	Tribal consultation on discovery and disposition (Ref. Mitigated Negative Declaration Measure TRI 3)	Project Developer & Project Archaeologist	Prior to and during project construction activities	
38.	Human remains found during earthmoving (Ref. Mitigated Negative Declaration Measure TRI 4)	Project Developer	Prior to and during project construction activities	

Section 5.0 References

5.1 Preparers

Randolph J. Coleman, AICP, CA, CWB and Environmental Engineer Altec Land Planning 19531 Highway 18 Apple Valley, CA 92307

Ginger E. Coleman, Director of Environmental Planning Altec Land Planning 19531 Highway 18 Apple Valley, CA 92307

5.2 References

- 1. County of San Bernardino General Plan Land Use Element.
- San Bernardino County Land Use Plan/General Plan Land Use Zoning Districts, Map EH22A Helendale.
- 3. County of San Bernardino 2007 General Plan Conservation Element.
- 4. Aerial photos of Helendale, Google Earth.
- 5. United States Soil Conservation Service Soil Survey of San Bernardino County, California.
- 6. County of San Bernardino 2007 General Plan 2013-2021 Housing Element.
- 7. County of San Bernardino 2007 General Plan Safety Element.
- 8. Latest adopted version of the California Building Code.
- 9. Flood Insurance Rate Map, Community Number 06071C5150J, Effective Date September 2, 2016, Federal Emergency Management Agency.
- Mojave Desert Air Quality Management District CEQA Guidelines, August 2016.
- 11. County of San Bernardino 2007 General Plan Circulation Element.
- 12. United States Bureau of Land Management California Desert Conservation Area, 1988.
- County of San Bernardino 2007 Development Code, Chapter 88.01, Plant Protection and Management,
 Section 88.01.040, Regulated Trees and Plants and General Permit.
- 14. County of San Bernardino 2007 General Plan Noise Element.
- 15. County of San Bernardino 2007 Development Code, Chapter 83.090.050, *Infrastructure Improvement Standards Desert Region*.
- 16. County of San Bernardino Public Works Transportation Design Standards.
- 17. County of San Bernardino 2007 Development Code, Chapter 83.10, Landscape Standards.
- 18. County of San Bernardino Public Works Transportation Design Standards.
- 19. 2006 San Bernardino County Important Farmland Map, California Department of Conservation.
- 20. California Environmental Quality Act.

- 21. Mojave Desert Air Quality Management District Federal 8-Hour Ozone Attainment Plan (Western Mojave Desert Non-attainment area); June 9, 2008.
- 22. County of San Bernardino 2007 Development Code, Chapter 83.10, *Landscape Standards*.
- 23. County of San Bernardino 2007 Development Code, Section 83.01.080, Noise.
- 24. San Bernardino County Fire Department Regulations.
- 25. County of San Bernardino 2007 General Plan Final Environmental Impact Report.
- 26. Southern California Association of Governments 5th Cycle Regional Housing Needs Assessment Allocation Plan 1/1/2014 10/1/2021, October 2012.
- 27. County of San Bernardino 2007 Development Code.
- 28. DOC (California Department of Conservation, Division of Land Resource Protection) A Guide to the Farmland Mapping and Monitoring Program, Table A-28
- 29. MDAQMD (Mojave Desert Air Quality Management District) 2009, California Environment al Quality Act and Federal Conformity Guidelines
- 30. Mojave Water Agency 2015 Urban Water Management Plan and Environmental Impact Report
- 31. San Bernardino County Greenhouse Gas Emissions Reduction Plan

Section 6.0 Appendices

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6.1 Exhibits

Exhibit 6.1.1 - Regional Location Map



Exhibit 6.1.2 - Regional Aerial Map



Exhibit 6.1.3 - Helendale Community Services District Boundary and Sphere

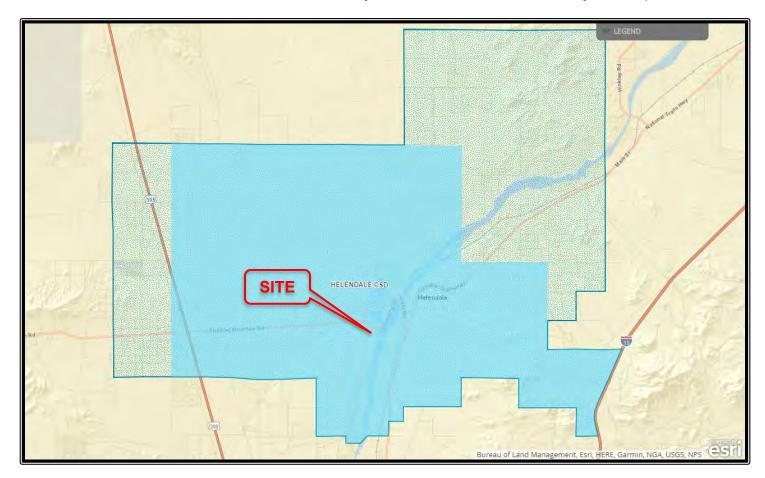


Exhibit 6.1.4 - Site Aerial Maps



Exhibit 6.1.5 - Site Assessor Parcel Map (APN)

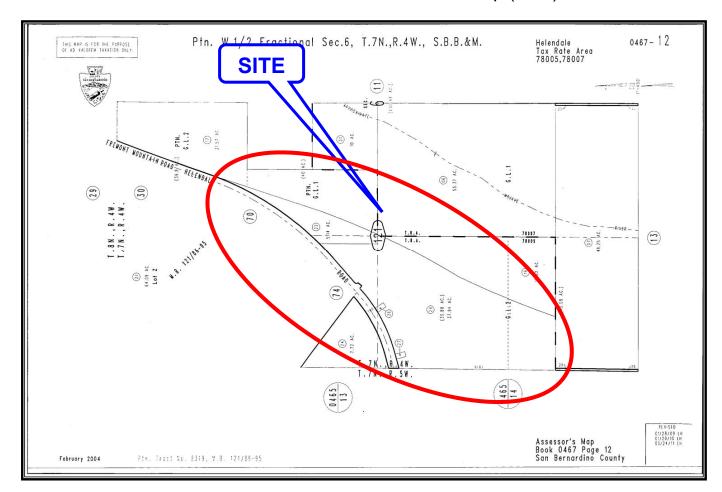


Exhibit 6.1.6 - 2012 USGS QUAD Sheet - Helendale

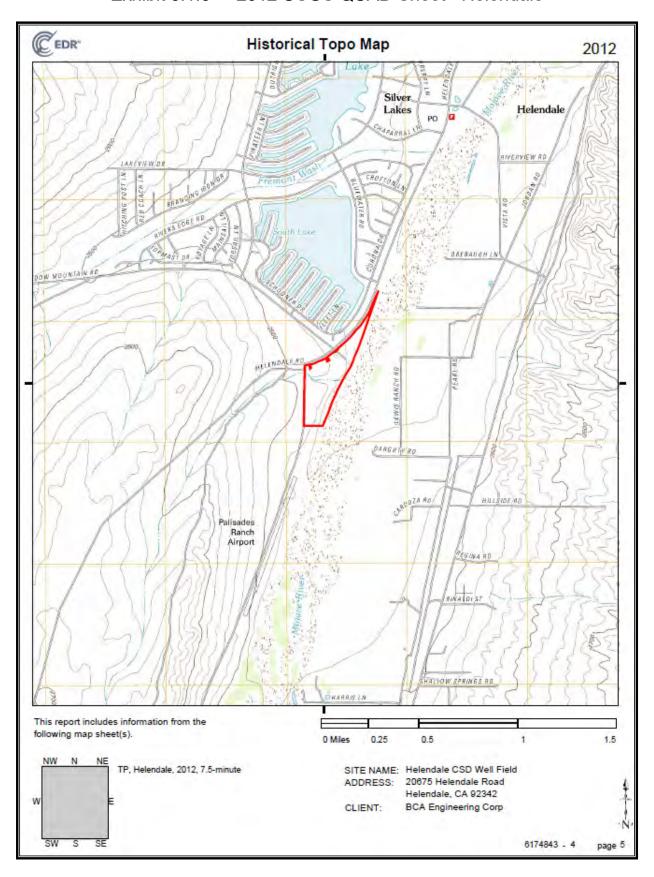


Exhibit 6.1.7 - Earthquake Faults

Helendale Fault 2 miles Northeast is nearest Helendale-South Lockhart fault zone, South Lockhart section



Exhibit 6.1.8 - Soils Map

United States Department of Agriculture Natural Resources Conservation Service

117 – Cajon Loamy Sand (majority of Site), 103 - Badlands; 113 – Cajon Sand (Bluffs along Mojave River); 171 – Villa Loamy Sand (Drainage); 163 – Torriorthents-Torripsamments-Urban Land Complex (Along Silver Lakes development)

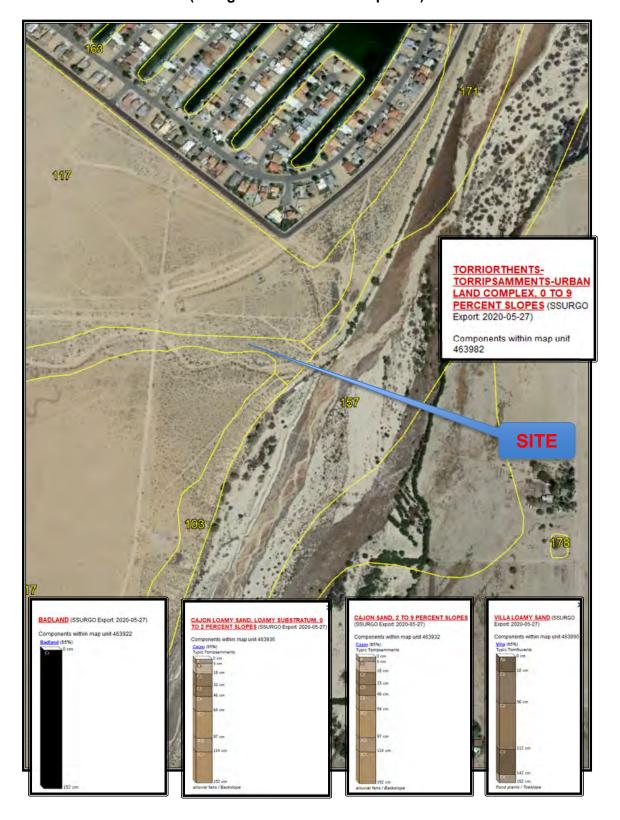


Exhibit 6.1.10 - Approximate Location of New Well and Pipeline

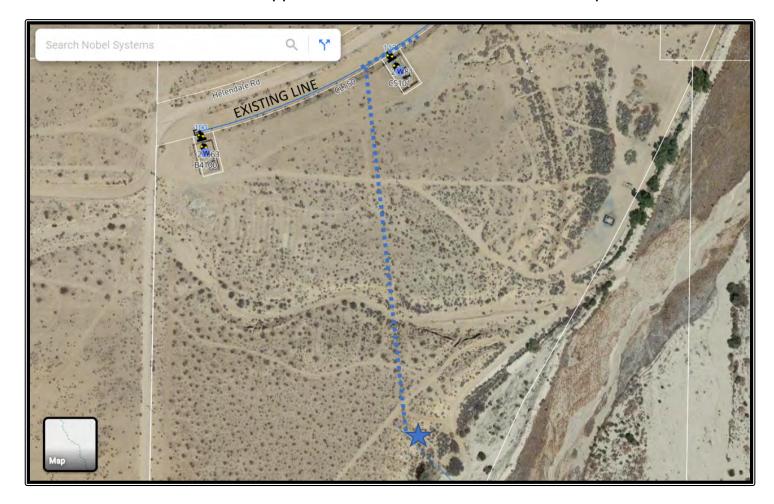


Exhibit 6.1.11 - Approximate Distance to Nearby Water Wells



Exhibit 6.1.12 - FEMA Flood Map Information

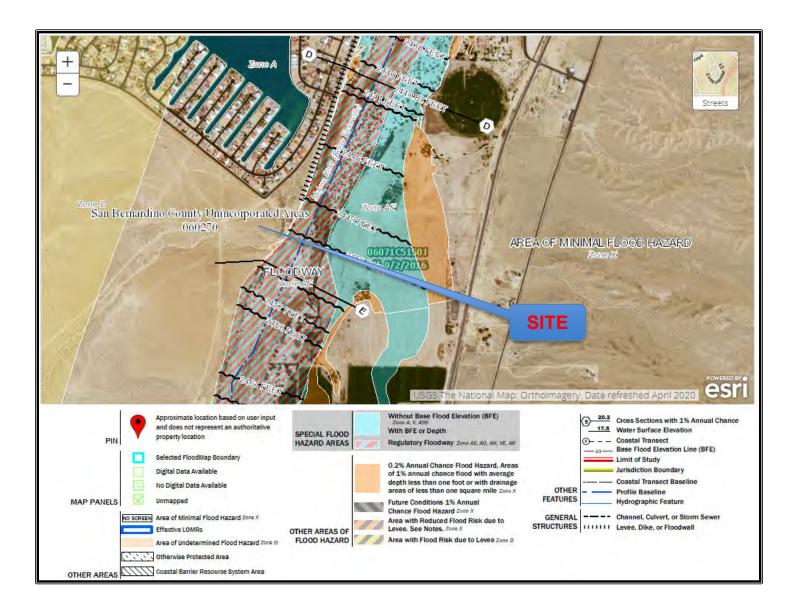
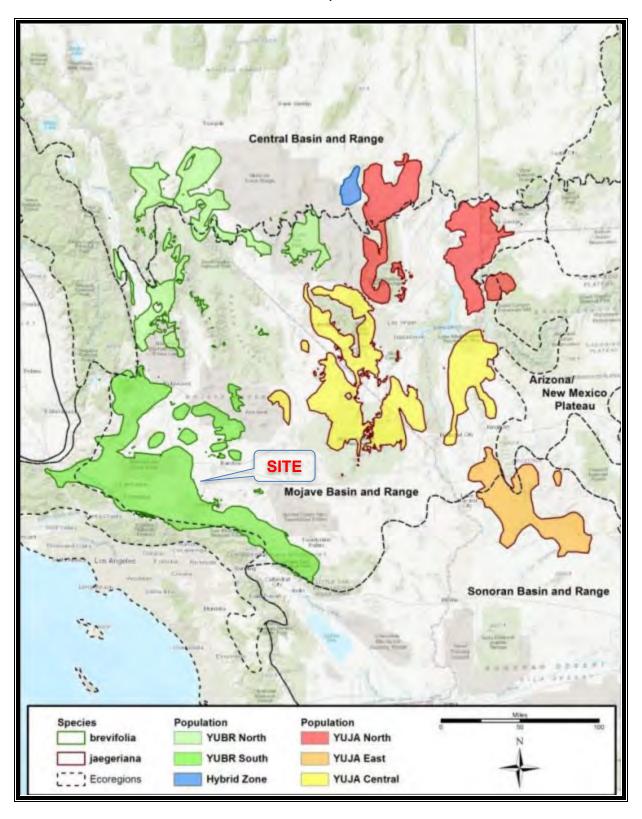


Exhibit 6.1.13 - Western Joshua Tree CESA Petition & DFW's Evaluation of Petition Map



California Looks at Protections for Iconic Joshua Tree

April 13, 2020NATHAN SOLIS

Conservationists say climate change and urban sprawl could erase the Joshua tree from California's deserts by the end of the century.



The iconic Joshua tree in California's Mojave Desert. (CN) — The Joshua trees of the Mojave Desert may get a lifeline from California following the Trump administration's refusal to give them federal endangered species protection last year. The emblematic species of the West face threats from urban sprawl on undeveloped wilderness and the unrelenting effects of climate change. Researchers estimate with more frequent drought and wildfires in California, most or all of the Joshua trees in the Golden State could be gone in the next 80 vears.

This past October, the Center for Biological Diversity petitioned

California Fish and Game Commission to list the Joshua tree as threatened, which would require state and local agencies to mitigate harm to the species' habitat and slow down the destruction of undeveloped land.

On Monday, the California Department of Fish and Wildlife wrote in summary memo there is "sufficient scientific information available to indicate that the petitioned action may be warranted and recommends that the petition be accepted and considered.

In its 39-page report, the California Department of Fish and Wildlife writes that the petitioners provide enough evidence on the western Joshua tree (Yucca brevifolia) that "identifies predation, invasive species, wildfires, climate change, and habitat loss to human development as the factors affecting the ability of western Joshua tree to survive and reproduce, stating that these factors are often related, synergistic, and collectively threaten the continued viability of the species.

Drought will likely lead to higher deaths of Joshua trees along with invasive grass species which will lead to more frequent fires according to the report's findings.

Later this summer, the state's Fish and Game Commission could take up the petition and determine if they will accept Fish and Wildlife's recommendation to consider the western species of the Joshua tree as a candidate for protection under California's Endangered Species Act.

We are elated that Joshua trees are a step closer to protection," said Brendan Cummings, the center's conservation director and a Joshua Tree resident. "These beautiful trees face huge threats that could drive them extinct in the wild. We urge the state to finalize these protections quickly so Joshua trees can survive and thrive in California for generations to come. According to the Center for Biological Diversity, approximately 40% of the Joshua tree range in California is located on private land. Joshua Tree National Park spans an area larger than the state of Rhode Island across portions the Mojave and Colorado deserts.

The Joshua tree was identified as one species until recently, when botanists determined there are two distinct species. The petition seeks to address the species in the national park westward toward the northern slopes of the San Bernardino and San Gabriel mountains, through the Antelope Valley, north toward the southern Sierra Nevada and east to the edges of Death Valley National Park and into Nevada.

California Commission OKs Petition Protecting Joshua Trees Under State's Endangered Species Act

Iconic Desert Plant Legally Protected During Yearlong Reviewwww.biologicaldiversity.org

By **Center for Biological Diversity** September 23, 2020

SACRAMENTO, Calif. September 22, 2020— The California Fish and Game Commission agreed today to accept a petition protecting western Joshua trees under the state's Endangered Species Act, granting legal protection to the iconic trees for at least a year. Joshua trees are threatened by climate change, fire and habitat destruction from urban sprawl and other development in their Mojave Desert home.

"This is a huge victory for these beautiful trees and their fragile desert ecosystem," said Brendan Cummings, the Center for Biological Diversity's conservation director, and a Joshua Tree resident. "If Joshua trees are to survive the inhospitable climate, we are giving them, the first and most important thing we can do is protect their habitat. This decision will do that across most of their range." Today's vote grants Joshua trees candidate status under the California Endangered Species Act, giving them legal protection during a yearlong review to determine whether the species should be formally protected under the state law.

The vote affirms the California Department of Fish and Wildlife's April <u>recommendation</u>, which came in response to a <u>petition</u> from the Center.

Commissioners also agreed to give developers of 15 shovel-ready industrial solar projects in Kern and San Bernardino counties so-called "take authorization," allowing them to kill Joshua trees. In exchange the developers must pay into a state fund that will be used to purchase and permanently preserve Joshua tree habitat. This exemption applies only during the review period and requires developers to pay approximately \$10,000 an acre, based on a ratio of 1.5 acres for every acre of occupied habitat that is destroyed.

"This summer's raging wildfires, heatwaves and hurricanes confirm our dire climate crisis and the need to urgently achieve 100% renewable energy," said Cummings. "But the best places to put solar panels are on rooftops, parking lots and degraded farmland, not pristine desert habitats. We disagree that these exemptions are needed, but we understand the commission's decision."

Recent studies show Joshua trees are dying off because of hotter, drier conditions, with very few younger trees becoming established. Even greater changes are projected over the coming decades. Earlier this year scientists projected that the Joshua tree will be largely gone from its namesake national park by the end of the century.

Last year the U.S. Fish and Wildlife Service denied federal protection to the species.

"Joshua trees face extinction in the wild and there's not much time left to save them. Human-caused climate change is making matters worse," said Cummings. "It's critical that the state stood up for these spectacular trees, because the federal government, local officials and for-profit corporations are facilitating their destruction."

Climate change could wipe out western Joshua trees, which already are failing to reproduce at drier, lower elevations. Prolonged droughts are projected to be more frequent and intense over the coming decades, shrinking the species' range and leading to more tree deaths. Higher elevations, where Joshua trees might survive increasing temperatures and drying conditions, are at risk of fire due to invasive non-native grasses.

Habitat loss and degradation are also major threats. Outside of Joshua Tree National Park, off-road vehicle use, cattle grazing, powerlines and pipelines and large-scale energy projects are destroying habitat. Approximately 40% of the western Joshua tree's range in California is on private land, with only a tiny fraction protected from development. Current projections show that virtually all of this habitat will be lost without stronger legal protections for the trees.

"Developers are bulldozing Joshua trees every day to build roads, powerlines, strip malls and vacation rentals," said Cummings. "If these beautiful plants are to have any hope of surviving in a warming world, we have to stop killing them. The California Endangered Species Act may be the only hope for saving these iconic symbols of the Mojave Desert."

The Joshua tree has recently been recognized as composed of two distinct species, the western Joshua tree (*Yucca brevifolia*) and the eastern Joshua tree (*Y. Jaegeriana*). The two species occupy different areas of the desert, are genetically and morphologically distinguishable, and have different pollinating moths.

Today's vote addresses the western species. The western Joshua tree has a boomerang-shaped range stretching from Joshua Tree National Park westward along the northern slopes of the San Bernardino and San Gabriel Mountains, through the Antelope Valley, northward along the eastern flanks of the southern Sierra Nevada and eastward to the edges of Death Valley National Park and into Nevada.

The eastern Joshua tree's range in California is centered in the Mojave National Preserve and extends east into Nevada, Arizona, and Utah.

If Joshua trees win protection under California's Endangered Species Act, state and local agencies will have to manage threats to them, including developing a recovery plan outlining a strategy to protect the species in the face of climate change.

Exhibit 6.1.14 - National Wetlands Inventory

https://www.fws.gov/wetlands/Data/Mapper.html

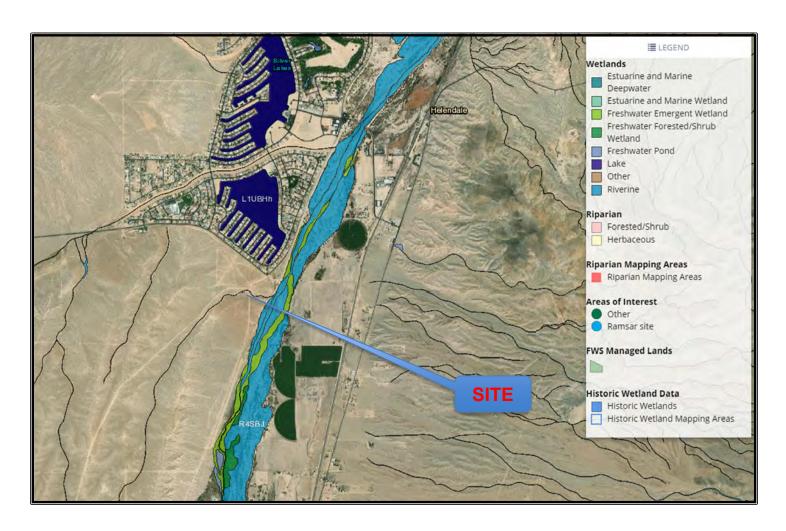


Exhibit 6.1.15 - Site Photographs



Street Scene: Looking Northerly along Helendale Road (Site on Right)



Street Scene: Looking Westerly along Shadow Mountain Road from Helendale Road (Site behind)



Street Scene: Looking Southerly along the unpaved portion of Helendale Road (Site on Left)



Street Scene: Looking at Site Easterly from Helendale and Shadow Mountain Intersection (Site on Right and Left)



Well Site #26081 along Helendale Road and west property line



Well Site #26063 along Helendale Road and west property line



Rivers Edge Middle School



Well Site within Silver Lakes, just west of Site



Well Site within Silver Lakes, just west of Site



Easement through north parcel Site



Near North Corner of Site looking Northerly along Helendale Road



Near North Corner of Site looking Southerly at Site along Helendale Road



Near North Corner of Site looking Easterly at Mojave River



Midpoint of Site west line looking Northerly along Helendale Road (Site on Right)



Midpoint of Site west line looking Easterly from Helendale Road (Site on Both sides)



Midpoint of Site west line looking Southerly along Helendale Road (Site on Left)



Midpoint of Site west line looking Easterly at Drainage Course from Helendale Road



Looking at Mojave Water Agency Water Line Easement along Helendale Road



Looking Southerly at Natural Gas Line along Helendale Road



Near Southwest Corner: Looking Easterly at Well Site and Mojave River area (Site on left)



Near Southwest Corner: Looking Northerly along Helendale Road (Site on right)



Midpoint of Site east line looking Southerly at Bluff area of Mojave River (Typical)



Looking at well sites and power poles near Mojave River
And OHV use with jumps and trails



Looking southerly across south parcel near well sites and power poles



Looking at remnants of alfalfa ranching near well sites and power poles near Mojave River



Looking at remnants of alfalfa ranching near well sites and power poles near Mojave River

6.2 Technical Studies

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Exhibit 6.2.1 - Biological Assessment Clearance Letter

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RandyAICP@gmail.com

Ginger Coleman, MPA, Director of Environmental Planning & Community Relations
Randy Coleman: AICP, CCIM, MIRM, Certified Wildlife Biologist #04390, Certified Arborist #WE-8024A, R.E. Broker #00836955,
Calif. Licenses: Civil Engineer #36293, Land Surveyor #5413, QSD/P #21595,

Helendale Community Services District c/o Dr. Kimberly Cox, General Manager 26540 Vista Road P.O. Box 359
Helendale, CA 92342
Office 760-951-0006
FAX 760-217-2221
kcox@helendalecsd.org

August 5, 2020

RE: Phase 1 Environmental Assessment completed in 2011 Update Letter

Prior to the purchase of this property by Helendale Community Services District in 2011, Randolph Coleman, AICP, CA, CWB, PE, PLS [Altec Land Planning] completed a thorough Site Survey with 10-meter transects specifically for Hazardous Materials and a review of the Governmental Records Search for Hazardous Materials.

This Site Survey also included a review for various Endangered and Species of Concern on this Site and visual observation of the adjacent properties for the following species:

- Desert tortoise
- Burrowing owls
- Mojave ground squirrel
- American badger
- Desert kit fox
- Nesting Birds
- Protected Native Desert Trees, Cactus, and other plants

This is to confirm no hazardous material were observe on the Site and no Endangered or Species of Concern were observed on in 2011 or August 4th and 5th, 2020.

If you have any question, please call. Thank you for your cooperation and we look forward to providing other services and assistance as needed, I and my family have been operating continuously since 1973 operating full-service, Civil & Soils Engineering, Planning, Land Surveying, Construction Management and since 1981 required Biological, Protected Plant, CEQA and other Environmental services for new projects.

Respectfully submitted,

Randolph J. Coleman, AICP CEP, CCIM, CDP, MIRM, Certified Wildlife Biologist #43090, QSD/P #21595 CDFW: Scientific Collecting Permit #11586, Certified Arborist/Tree Risk Assessment Qualified #WE-8024A

CA Licenses: Engineer-Civil #36293 expires June 30, 2022, Land Surveyor #5413 expires Sept. 30, 2022

RandyAICP@gmail.com

Ginger Coleman, MPA, Director of Environmental Planning & Community Relations
Randy Coleman: AICP, CCIM, MIRM, Certified Wildlife Biologist #04390, Certified Arborist #WE-8024A, R.E. Broker #00836955,
Calif. Licenses: Civil Engineer #36293, Land Surveyor #5413, QSD/P #21595,

MEMO: September 10, 2020

RE: Biological Assessment Clearance Letter for CEQA Initial Study Helendale CSD proposed Replacement Wells and Expansion of Well Field

Today, September 10, 2020, I completed a reconnaissance survey which consisted of a pedestrian (perimeter and interior trails) survey and vehicular observations in the greater area for potential endangered species or species of concern listed below for the preparation of a CEQA Initial Study and the incorporation of Biological Mitigation Recommendations and a Mitigation and Monitoring Plan with the final CEQA Initial Study being prepared for the well replacement(s) and expansion of an existing Well Field.

It is also noted that the Site was also reviewed specifically for hazardous materials during the preparation of Phase 1 Environmental Assessments in 2011 and again on August 4th and 5th, 2020 for the potential purchase by Helendale Community Services District (HCSD). This specifically did not include a boundary survey. However, the western section line is known. Additionally, discussions and prior experiences with the both the Safari Ranch (Carl Ross owner and long term prior owner was Robert Older) and Palisades Ranch have occurred.

In 2011 and in 2020, Randolph Coleman, AICP, CA, CWB, PE, PLS reviewed the Site for any new Hazardous Materials issues and various Endangered and Species of Concern on this Site and visual observation of the adjacent properties for the following species:

- Desert tortoise
- Burrowing owls
- Mojave ground squirrel
- American badger [added in 2019 but these are rare species to find anytime]
- Desert kit fox [added in 2019 but these are rare species to find anytime]
- Nesting Birds
- Protected Native Desert Trees [Joshua Trees], Cactus and other plants

This is to confirm no observations of Endangered or Species of Concern were observed on the Site in 2011 or during 2020.

Respectfully submitted,

Randolph J. Coleman, AICP CEP, CCIM, CDP, MIRM, Certified Wildlife Biologist #43090, QSD/P #21595 CDFW: Scientific Collecting Permit #11586, Certified Arborist/Tree Risk Assessment Qualified #WE-8024A CA Licenses: Engineer-Civil #36293 expires June 30, 2022, Land Surveyor #5413 expires Sept. 30, 2022

dated July 11, 2016

South Central Coastal Information Center

California State University, Fullerton Department of Anthropology MH-426 800 North State College Boulevard Fullerton, CA 92834-6846 657.278.5395

California Historical Resources Information System
Los Angeles, Orange, Ventura and San Bernardino Counties
sccic@fullerton.edu

7/11/2016

SCCIC File #: 16612.2711

Joe Mazariegos PA Design Associates, Inc 12371 Antelope Dr Victorville CA 92392

Re: Route 66 Gas Station, Helendale CA

The South Central Coastal Information Center received your records search request for the project area referenced above, located on the Helendale, CA USGS 7.5' quadrangle. The following summary reflects the results of the records search for the project area and a ½-mile radius. The search includes a review of all recorded archaeological and built-environment resources as well as a review of cultural resource reports on file. In addition, the California Points of Historical Interest (SPHI), the California Historical Landmarks (SHL), the California Register of Historical Resources (CAL REG), the National Register of Historic Places (NRHP), the California State Historic Properties Directory (HPD) listings were reviewed for the above referenced project site. Due to the sensitive nature of cultural resources, archaeological site locations are not released.

RECORDS SEARCH RESULTS SUMMARY

Archaeological Resources	Within project area: 0
	Within project radius: 0
Built-Environment Resources	Within project area: 0
	Within project radius: 0
Reports and Studies	Within project area: 0
	Within project radius: 3
OHP Historic Properties Directory	Within project area: 0
(HPD)	Within project radius: 0
California Points of Historical	Within project area: 0
Interest (SPHI)	Within project radius: 0
California Historical Landmarks	Within project area: 0
(SHL)	Within project radius: 0
California Register of Historical	Within project area: 0
Resources (CAL REG)	Within project radius: 0
National Register of Historic Places	Within project area: 0
(NRHP)	Within project radius: 0

HISTORIC MAP REVIEW – Victorville, CA (1934) USGS 15': indicated that in 1934, there was little to no visible development within the project site; however, there were five roads and several buildings within the vicinity of the project area. The Atchison Topeka and Santa Fe Railroad ran to the east of the project site and the Mojave River ran to the west of the project site. There was one school visible within the vicinity of the project area. Historic place names nearby included Las Cruces Ranch.

RECOMMENDATIONS

According to our records, the project site has not been subjected to any previous studies and the cultural resource sensitivity of the project site is unknown. However, there is the potential for the discovery of prehistoric and historic cultural resources within the project boundaries. Agricultural remains, foundations, trails, hearths, trash dumps, privies, changes in soil colorations, human or animal bone, pottery, chipped or shaped stone, etc. are all potential indications of an archaeological site. Therefore, customary caution and a halt-work condition should be in place for any ground-disturbing activities. In the event that any evidence of cultural resources is discovered, all work within the vicinity of the find should stop until a qualified archaeological consultant can assess the find and make recommendations. Additionally, the Native American Heritage Commission should be consulted to identify if any additional traditional cultural properties or other sacred sites are known to be in the area.

For your convenience, you may find a professional consultant* at www.chrisinfo.org. Any resulting reports by the qualified consultant should be submitted to the South Central Coastal Information Center as soon as possible.

*The SCCIC does not endorse any particular consultant and makes no claims about the qualifications of any person listed. Each consultant on this list self-reports that they meet current professional standards.

If you have any questions regarding the results presented herein, please contact the office at 657.278.5395 Monday through Thursday 9:00 am to 3:30 pm. Should you require any additional information for the above referenced project, reference the SCCIC number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the California Historical Resources Information System,

Stacy St. James 2016.07.29 13:33:14 -07'00'

Lindsey Noyes Lead Staff Researcher

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the California Historical Resources

Information System (CHRIS) Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

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December 27, 2017

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December 27, 2017

Randy Arnold, President RCA Associates, Inc. 15555 Main St. #D4-235 Hesperia, CA 92345

Subject: Cultural/Paleontological Resource Assessment for the Route 66 Market and Gas Project (APN

0467-101-12), Located at 26426 National Trails Highway, Helendale, County of San Bernardino,

California (DUKECRM Project C-0237)

Dear Mr. Arnold;

Duke Cultural Resources Management, LLC (DUKECRM) is under contract to perform a cultural resources assessment of the proposed Route 66 Market and Gas Project (Project), located at 26426 National Trails Highway in Helendale, San Bernardino County, California. This report has been prepared to comply with the California Environmental Quality Act (CEQA).

The Project is situated at the southwest corner of National Trails Highway and Vista Road, in the unincorporated community of Helendale in Section 5, Township 7 North, Range 4 West, Lot 2 of San Bernardino County, as depicted on the USGS *Helendale, California* 7.5" quadrangle map (see Attachment 1 for Project Vicinity, Location, and Aerial maps). The Project is comprised of 1.72 acres of vacant land, as shown on Book 467, page 10 in the Office of the County Recorder of San Bernardino County. The Project proposes development of a gas station with a total of six pumps; a 4,998 square foot convenience store/fast food facility with a Type 21 liquor license, tobacco, and propane sales; and associated entrances, parking, lighting, sidewalks, signage, and landscaping.

CULTURAL RESOURCES

Record Search

A records search was performed at the South Central Coastal Information Center (SCCIC) on October 9, 2017, by Archaeologist Matthew Stever, M.A., RPA. The results of the records search indicate that the Project has not been previously surveyed. There have been nine cultural resources studies conducted within a one-mile radius of the Project. They include three linear surveys, five small surveys (approximately 10 acres or less), and one large survey (more than 50 acres). In total, less than 20% of the one mile radius has been surveyed for cultural resources. Table 1 presents eight of the nine cultural resource studies within one mile of the Project. The report omitted from the table was single power pole replacement reports with negative results approximately .8 miles north of the project.

The results of the record search indicate there are no cultural resources recorded within the Project. However, there are four resources within one mile of the Project. CA-SBR-3033/H includes the (prehistoric) Old Mojave Trail or Road, and historic Old Government Road, .5 miles west of the project. It is unknown if CA-SBR-3033/H has been evaluated for the National Register of Historic Places (NRHP) or California Register of Historic Resources (CRHR). CA-SBR-6693H, is located west of the Project and it is the Atchison, Topeka and Santa Fe (AT&SF) Railroad. Due to its length, various segments of the AT&SF has been evaluated for listing on the NRHP/CRHR and have been ineligible, while other segments have been found eligible for listing. It is unknown if the segment closest to the Project has been evaluated.

ARCHAEOLOGY HISTORY PALEONTOLOGY

Table 1. Cultural Resource Studies within One Mile of the Project

Report No.	Year	Author	Affiliation	Title	Resources reported on in current Project
SB-00078	1967	Walker, Clifford E.	San Bernardino County Museum Association	Life and Adventure Along the Mojave River Trail	36-003033
SB-01327	1982	Sutton, Mark	Author	M.J. Baxter Explosives Storage Site	None
SB-01734	1987	Shackley, Steven, et al.	Dames and Moore	Cultural and Paleontological Resources Survey: US Sprint Fiber Optic Cable Project, Rialto, California to Las Vegas, Nevada.	None
SB-01758	1988	De Munck, Victor	Archaeological and Ethnographic Field Associates	Environmental Impact Evaluation: A Cultural Resource Assessment of 11.70 Acres of Land Designated as Assessor's Parcel No. 467-142-12 in Vicinity of Helendale, San Bernardino County, California	None
SB-04247	1997	Lerch, Michael	M. K. Lerch and Associates	Cultural Resources Inventory & Evaluation of the P&V Enterprises Phase V Land Exchange, Barstow, San Bernardino County, CA.	36-008702
SB-05055	1998	Lerch, Michael	M.K. Lerch and Associates	Reach 1B, 2, 3A Addendum: Cultural Resources Inventory and Evaluation of the Mojave River Pipeline Project, Phelan to Minneola, San Bernardino County, California	None
SB-5433	2006	Jordan, Stacey	Jones & Stokes	Archaeological Survey Report for the Southern California Edison Company New Circuit DSP-Daylight O/O Helendale Substation, San Bernardino County, California. (WO#6073-5321, AI36-5312)	None
SB-07283	2012	Underbrink, Susan	TRC	Class III Cultural Resource Survey for BNSF Railway 2013 Bridge Renewal Project, San Bernardino County, CA	None

Site CA-SBR-8702 was recorded as a stone circle and associated surface artifacts, and is located approximately .8 miles south of the Project. CA-SBR-8702 was determined to not be eligible for listing upon the NRHP. P-1518-2, located approximately one mile north of the project, was recorded as a prehistoric village site in 1939, and reported destroyed or built over by 1973, and could not be relocated in 2002 (Estes 2002). The recording of this site has been inconsistent and therefore the actual location is largely unknown.

Though outside the one mile radius, nine prehistoric resources are located just over one mile to the south near CA-SBR-8702. These sites consist primarily of lithic scatters, though rock cairns and a trail is present. None of these resources is listed on the NRHP or CRHR, nor are they listed in the Historic Properties Directory for San Bernardino County.

While not listed at the SCCIC as a resource upon the Helendale Quadrangle Map, the Project abuts CA-SBR-2910H, the National Old Trails Highway/U.S. Highway 66/Route 66. This famous road runs nearly 300 miles through California (Bischoff 2005) and is both eligible for and listed on, the NRHP and CRHR (Roland et al. 2011). A letter report dated July, 2016, evaluates the section of National Trails Highway immediately north of the Project due to the repair of washouts along the roadway (Hatheway 2016) and summarizes three previous NRHP and CRHR eligibility determinations have been made for CA-SBR-2910H. See Table 2 below for an accounting of resources within one mile.

Table 2: Cultural Resources Within One Mile of Project

Primary #	Description	Distance
P-1518-2	Prehistoric Village Site	~1-mile, north
CA-SBR-2910H	National Trails Highway/Route 66	Adjacent, east

Primary #	Description	Distance
CA-SBR-3033/H	Old Mojave Trail/Old Government Road	~1/2-mile, west
CA-SBR-6693H	Atchison, Topeka and Santa Fe (AT&SF) Railroad	~1/4-mile, west
CA-SBR-8702	Prehistoric Stone Circle and Associated Surface Artifacts	~3/4 mile, south

Historic Aerial Photographs

A review of historic aerial photographs, dating to 1952, show the soils within the Project have been disturbed, likely by vegetation control disking or grubbing. A small structure appears on the property in the 1968 photograph at the same time as, and likely associated with, the buildings immediately west of the Project (Historicaerials.com 2017). This is likely the shed that is currently standing on the property. No other structures or features are noted on the property.

Field Survey

A 10 meter transect pedestrian survey of the Project (Figures 1-4 below) was conducted by Mr. Stever on October 13, 2017. The topography is flat, and soils are characterized as Cajon Gravelly Sand, alluvium derived from granitic parent material (USDA-NRCS 2017). Vegetation consisted primarily of scrub juniper, creosote bush, and non-native grasses. The Project appears to have been at least surficially disturbed by vegetation control and/or grading, as well as modern refuse dumping. Surface visibility was excellent at approximately 85%. One resource, seen in historic aerial photographs, was confirmed to be a small shed enclosing a water tank, and was designated site C-0237-001H (see Historic Resource Evaluation section below). No other archaeological or paleontological resources were observed on the surface.



Figure 1: Project overview.



Figure 2: Project overview.



Figure 3: Project overview.



Figure 4: Project overview.

Buried Sites Testing Program

At the request of the lead agency, on the recommendation of the San Manuel Band of Mission Indians, a limited excavation program was conducted to determine if there are any buried archaeological sites within the project. Six 50 cm by 50 cm Shovel Test Pits (STPs) and six auger holes in the bottom of each STP were excavated on December 12 and 13, 2017 by Field Director Nicholas F. Hearth, M.A., RPA and Archaeologist Mathew Stever M.A, RPA. The purpose of the excavations was to test for the presence or absence of archaeological material, to examine soil stratigraphy and past depositional environments, and to aid in assessing the archaeological sensitivity of the Project. Three STPs and auger locations were based on the Project plan and assumed that the locations of the in-ground fuel tanks, septic vault/drain field, and the physical building footprint would be the areas of deepest earth moving activity. Additionally, three arbitrary locations within proposed parking lot/ paved areas were chosen to ensure adequate coverage of the parcel. The locations of the STPs were recorded using a Spectra Precision Mobile Mapper 20 GPS unit with submeter post-processing accuracy.

The STPs were manually excavated using a shovel at each of the six locations (Figure 5 below) and all soils were screened through ½ inch mesh. Each STP was given a consecutive number (STP's 1-6), and each was 50cm x 50 cm in size to a maximum of 1 meter deep. The STPs were excavated in arbitrary 10 cm levels, and all levels were excavated using the highest corner of the STP as an arbitrary datum to record depth below ground surface. No cultural artifacts or features were encountered in the STPs.

Additionally, due to the estimated depths of Project excavation, a three inch diameter, manually operated auger was used to bore a hole in the bottom of each STP (Figure 6 below), and attempted to reach a depth of 10 ft. below ground surface. The locations of the STPs and augers correlate, so Auger 1 was placed in the bottom of STP 1. A shovel was used to prepare the bottom of each STP for auguring, creating a flat spot for the soil extraction bucket, which was necessary due to the extremely dry, loose nature of the sand falling out of the auger head. The corner of each STP selected for auguring was soaked with water to prevent loose sand from refilling the auger hole. All soil from auguring was screened through 1/4" mesh. When a potential impasse was reached with the sand auger head, a dig bar was used to attempt to break up the obstruction, and a standard soil auger head was used to attempt to remove the obstruction before impasse was determined.



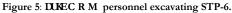




Figure 6: DUKEC R M personnel excavating AUG-4.

The soil strata profile of each STP was recorded using USDA soil texture descriptions and Munsell colors to gain an understanding of the geomorphology of the Project. Soils were observed during auguring, and any changes were recorded. The STPs and augers were backfilled after excavation was complete and the data were completely recorded. During backfilling, care was taken to not damage the sidewalls. No archaeological or paleontological materials were discovered in any of the STP's or auger holes. Table 2 below presents the locations and depths of the STPs and auguring.

Table 2: STP/Auger Locations, Depths, and Results

STP/ Auger	UTM Location(E/N)	STP Depth (cmbs)	Auger Soils/Stratigraphy Depth (cmbs)		Depth		Cultural Material Present
1	470041/3843377	90	110	Fill soils from surface to 22 cm. A1, 22-29cmbs, medium silty sand with cobbles. 29-90cmbs, fine silty sand with cobbles	No		
2	470022/3843344	90	160	Disturbed H1, surface to 45cmbs, , context bad. H2, 45-90cmbs, medium-fine sandy silt with 20% gravels and 5% cobbles			
3	469997/3843315	75	133	, s			
4	470045/3843356	90	190	20% gravels, cobbles increasing with depth and poorly developed silt lensing. H2, 50-90cmbs, Medium sand with trace silt and 20% gravels and cobbles			
5	470058/3843333	90	200	200 H1, Surface to 34cmbs, medium silty sand, 20% gravel and cobbles, and with poorly developed silt lensing and a weak transition to H2. H2, 34-90cmbs, Medium sand with 20% gravel and cobbles, massive.			
6	470045/3843310	63	133	H1, Surface to 50cmbs, silty sand with grit and 10% gravel and cobbles. Poorly defined lensing of gravels. H2, 50-63cmbs, fine silty sand with same contents as H1.	No		

^{*}cm bs = centimeters below ground surface

Historic Resource Evaluation

The historic shed discovered on-site was given a temporary site number: C-0237-001H. This resource was recorded and evaluated for the CRHR/NRHP by Dana Supernowicz, M.A. RPA. Site C-0237-001H consists of a single-story, wood or stick-frame, gabled roof shed used to shelter a well and pump, see Figures 7 and 8 below. The structure measures approximately 8' x 10' with a 9' high roof plate. The shed rests on a poured concrete footing or stem wall foundation. Besides the simple rectangular shape or massing and gable roof clad with wood sheathing (presumably the shed had a tin or asphalt shingle roof), other character defining features include a small gable vent at the apex or ridgeline of the roof, v-groove wood exterior wall cladding, a wooden paneled door, and a simple rectangular window on one gable end, lacking the window frame and glass. The interior of the shed features a galvanized steel water tank and other miscellaneous material related to the tank. The interior walls are not sheathed and appear to be 1" x 6" framing. Immediately adjacent to the shed is a chain link fence and a remodeled circa 1960s California Ranch style residence beyond the fence.



Figure 7: C-0237-001H overview southwest.



Figure 8: C-0237-001H overview northwest.

Despite the fact that the subject property retains relatively good integrity of location, setting, design, materials, workmanship, feeling, and association, the subject property does not appear to be eligible for the NRHP nor CRHR. This finding is based largely upon the property's overall lack of association with the National Trails Highway during its primary period of use, and, ultimately, significance to the motoring public. Nor does the property have direct association with the Small Tracts Act of 1938. Although the property was once likely associated with 15401 Vista Road, this association is diminished, due to a parcel split and a variety of contemporary improvements to the Vista Road property. The pump house shed likely served the Vista

Road property at one time, but was subsequently abandoned. In regards to NRHP Criterion D and CRHR Criterion 4, no evidence was found to support a finding that the property contains archaeological data of significance. Please see Attachment 3 for the complete evaluation on California Department of Parks and Recreation 523 Forms.

PALEONTOLOGY

The geology in the vicinity of the Project has been mapped by Dibblee and Minch (2008) at a scale of 1:62,500. A review of this map indicated that the Project is located on surficial sediments (Oa) of the Holocene Epoch (11,700 years ago to today), specifically alluvial silt, sand, and gravel of valley areas derived from adjacent higher ground (Dibblee and Minch 2008). Because of their young age, Holocene-age deposits have not accumulated enough biological material to contain significant paleontological resources, and are assigned a low sensitivity at the surface. However, Holocene-age deposits can transition with depth into older deposits of the Pleistocene Epoch (2.5 million years ago to 11,700 years ago), which would have a higher sensitivity. A records search by the Division of Earth Sciences of the San Bernardino County Museum revealed no documented fossil localities within the Project boundaries or within several miles in any direction (Gilbert 2017). Paleontologist Benjamin Scherzer, M.S., also performed a search of the online collections at the University of California Museum of Paleontology, the Natural History Museum of Los Angeles County, the online Paleobiology Database, and other published literature for fossil localities from Pleistocene-age deposits in or near (within 5 miles) the Project. This search produced no fossil localities within the Project, but did produce one fossil locality near the Project which has produced remains of rabbit and hare (Sylvilagus sp., Lepus sp.), rodent (Perognathus sp., Dipodomys sp., Thomomys sp., Neotoma sp.), horned lizard (Phrynosoma sp.), and mourning dove (Zenaida macroura) (Jefferson 1989). The surficial sediments (Qa) in the Project have a low sensitivity in the shallower levels, but due to the potential to transition at depth into fossiliferous Pleistocene deposits, they are assigned a high sensitivity at depth.

Impacts Analysis and Recommendations

DUKE CRM evaluated the proposed Project for impacts to cultural and paleontological resources according to CEQA. Based on a lack of previously recorded prehistoric archaeological sites in the one mile vicinity, the disturbed nature of the soils from vegetation control, and negative results from field survey and buried sites testing, the likelihood of encountering prehistoric archaeological resources is low. C-0237-001H, a historic shed, is likely associated with the residences immediately west of the Project is not eligible for the CRHR/NRHP. The negative results of the STP's and augers indicate the possibility of historic-aged archaeological deposits are also low. The sensitivity of this Project for archaeological resources is considered low as there is little potential to impact archaeological resources.

The Project plans alterations along the frontage of National Trails Highway/Route 66 (CA-SBR-2910H), which is considered eligible for the CRHR/NRHP. These alterations include a 40-foot-wide driveway entrance and sidewalk, curb, and gutter on either side of the driveway. These alterations will likely not require removal of portions of the existing National Trails Highway/Route 66. However, they will change the setting and character of the National Trails Highway/Route 66 along the project. This change to the setting is considered minor and not significant as it does change eligibility of the National Trails Highway/Route 66; it is still considered eligible for the NRHP/CRHR. Due to the disturbed nature of the soils, the negative results of subsurface testing, and the minimal impact to Route 66, DUKE CRM does not recommend archaeological monitoring of the Project, and recommends that the Project will have no significant impacts on cultural resources. If previously unidentified cultural materials are un-earthed during ground disturbing activity, work shall be halted in that area until a qualified archaeologist can assess the significance of the find and make recommendations.

Based on the results of the Paleontological Record Search, the sensitivity for paleontological resources is low in surficial sediments; however, the sensitivity can increase at depth to high. This would be considered a potential significant impact. In order to mitigate this potential impact to a level that is less than significant under CEQA, DUKE CRM recommends paleontological monitoring as described below:

- a. The applicant shall retain a San Bernardino County qualified paleontologist who meets County's requirements for paleontologists.
- b. The qualified paleontologist shall be on-site at the pre-construction meeting to discuss monitoring protocols.
- c. A paleontological monitor, working under the direct supervision of the qualified paleontologist, shall be on-site to observe ground disturbing activities below 6 feet in depth from the surface. If no paleontological resources are observed after 50 percent of ground disturbance is complete, paleontological monitoring may be reduced to part-time or spotchecks.
- d. The paleontological monitor shall be empowered to temporarily halt or redirect excavation efforts if paleontological resources are discovered.
- e. In the event of a paleontological discovery the monitor shall flag the area and notify the construction crew immediately. No further disturbance in the flagged area shall occur until the qualified paleontologist has cleared the area.
- f. The qualified paleontologist shall quickly assess the nature and significance of the find. If the specimen is not significant it shall be quickly removed and the area shall be cleared.
- g. If the discovery is significant the qualified paleontologist shall notify the applicant and the County immediately.
- h. In consultation with the applicant and the County the paleontologist shall develop a plan of mitigation which will likely include salvage excavation and removal of the find, removal of sediment from around the specimen (in the laboratory), research to identify and categorize the find, curation of the find in a local qualified repository, and preparation of a report summarizing the find.

If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

Thank you for contacting DUKE CRM on this request. If you have any questions or comments, you can contact DUKE CRM at (949) 356-6660 or by e-mail at mattstever@dukecrm.com.

Sincerely,

DUKE CULTURAL RESOURCES MANAGEMENT, LLC

Matthew Stever, M.A. RPA

Archaeologist

Attachment 1: Project Maps
Attachment 2: STP Map
Attachment 3: DPR 523 Form

REFERENCES CITED

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2005 Life in the Past Lane. The Route 66 Experience. Historic and Management Contexts for the Route 66 Corridor in California. Volume I Route 66 in the California Desert. Tucson, Ariz.: Statistical Research, Inc., 2005.

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USGS (United States Geological Survey)

1956 Helendale, California 7.5 Minute Quadrangle https://ngmdb.usgs.gov/topoview/viewer/#14/34.7450/-117.3221, accessed October 5, 2017.

DUKE CULTURAL RESOURCES MANAGE	~ F/M/I F/M !	
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Attachment 1

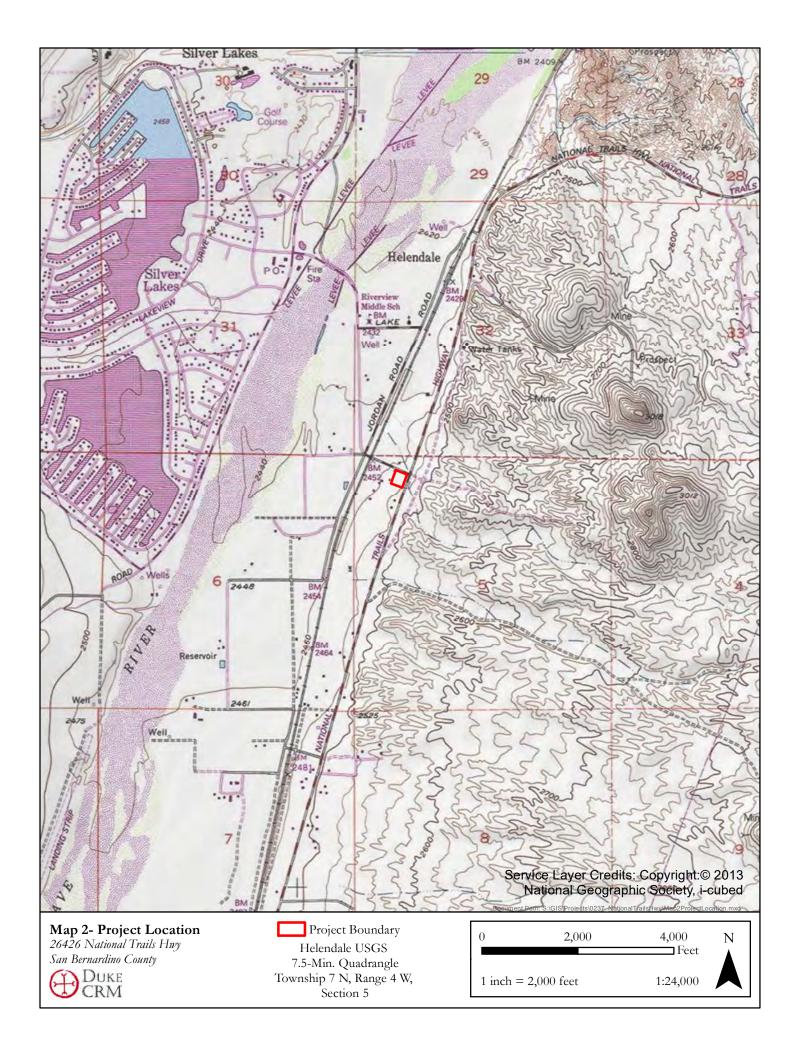
PROJECT LOCATION, VICINITY, AND AERIAL MAPS



Map 1- Project Vicinity 26426 National Trails Hmy San Bernardino County





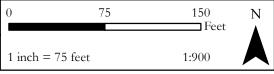




Map 3- Project Aerial 26426 National Trails Hwy San Bernardino County



Helendale USGS 7.5-Min. Quadrangle Township 7 N, Range 4 W, Section 5



Duke cultural resources management

Attachment 2

STP Location Map



Attachment 3

DPR 523 Forms



State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
DRIMARY RECORD

Primary # HRI #	
Trinomial	
NRHP Status Code:	
Other Listings	
Review Code Reviewer Date	

Page <u>1</u> of <u>7</u>

*Resource Name or #: 26426 National Trails Highway Shed

P1. Other Identifier: APN 046-710-113

*P2. Location: □ Not for Publication ■ Unrestricted *a. County: San Bernardino

*b. USGS 7.5' Quadrangle: Helendale, California

c. Address: 26426 National Trails Highway City: Helendale Zip: 92342

d. UTM:

e. Other Locational Data (APN #): The subject structure is located in the rear of 26426 National Trails Highway (APN 046-710-112), adjacent to a single-family residential house and commercial property at 15401 Vista Road on a separate parcel (APN 046-710-113).

*P3a. Description: The property consists of a single-story, wood or stick-frame, gabled roof shed used to shelter a well and pump. The structure measures approximately 8' x 10' with a 9' high roof plate. The shed rests on a poured concrete footing or stem wall foundation. Besides the simple rectangular shape or massing and gable roof clad with wood sheathing (presumably the shed had a tin or asphalt shingle roof), other character defining features include a small gable vent at the apex or ridgeline of the roof, v-groove wood exterior wall cladding, a wooden paneled door, and a simple rectangular window on one gable end, lacking the window frame and glass. The interior of the shed features a galvanized steel water tank and other miscellaneous material related to the tank. The interior walls are not sheathed and appear to be 1" x 6" framing. Immediately adjacent to the shed is a chain link fence and a remodeled circa 1960s California Ranch style residence beyond the fence.

*P3b. Resource Attributes: HP4 - Ancillary building

*P4. Resources Present: ☐ Building ■ Structure ☐ Object ☐ Site ☐ District ☐ Element of District

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects).



P5b. Description of Photo: Looking at the shed with the single-family residence behind the shed.

***P6. Date Constructed/Age and Sources:** ■ Historic Circa late-1950s or 1960s.

*P7. Owner and Address:

***P8. Recorded by:** Dana E. Supernowicz, Historic Resource Associates, 2001 Sheffield Drive, El Dorado Hills, CA 95762.

*P9. Date Recorded: December 12, 2017
*P10. Type of Survey: ■ Architectural

Describe: Field Survey

***P11. Report Citation:** Architectural Evaluation Study of the 26426 National Trails Highway Project, 26426 National Trails Highway, Helendale, San Bernardino County, CA 92342. Prepared for Duke Cultural Resources Management, LLC, 18 Technology Drive, Suite 103, Irvine, CA 92618. Prepared by Historic Resource Associates, 2001 Sheffield Drive, El Dorado Hills, California 95762. December 2017.

^{*}Attachments: Building, Structure, and Object Record; Photograph Record

Primary #: HRI#:

BUILDING, STRUCTURE, AND OBJECT RECORD

Page _	<u>2</u> of <u>7</u>	*Resource	Name or #: 26	426 National Trails High	way Shed	NRHP Status Code: 6Z
B1.	Historic Name: Ur	determined				
B2.	Common Name: I	Pump House Shed				
B3.	Original Use: Pump	House Shed	B4	. Present Use: Abando	oned	
*B5.	Architectural Style	: Vernacular Utilitarian Sh	ied			
*B6.	been either moved to	2	constructed on its	current side in the late		pump house shed appears to have 1960s. The materials used in the
*B7.	Moved? □ No □	l Ŷes ■ Unknown	Date:	Original Location	n:	
*B8.	Related Features:	Single-family remodeled C	alifornia Ranch	style residence, power lin	es, and chain-l	ink fence.
B9a.	Architect: N/A	B9b. Builder: Undete		, , ,	,	
*B10.	Significance: The	me: Post-World War II R	esidential/Comm	ercial Development	Area: Helend	dale/San Bernardino County
	Period of Significa A, B, C, and D; CRH	Ince: Late 1950s-early 196 R 1, 2, 3, and 4.	60s Property	Type: Vernacular Utilit	arian	Applicable Criteria: NRHP

The subject property is located in Helendale in San Bernardino County. Helendale or Silver Lakes is an unincorporated census-designated community located in the Victor Valley of the Mojave Desert. The town lies along US Route 66/National Trails Highway, west of the Mojave Freeway (I-15), between Barstow and Victorville (USDI, National Park Service 2011). The historic context for the subject property is rooted in the Small Tract Act of 1938 and the modern-era of residential development that occurred in eastern San Bernardino County during the 1950s and 1960s, associated with improved highways and motorized travel.

The Mojave Desert was one of the last places in the "lower 48" where the federal government granted free homesteads to anyone who was willing to improve the land. Five-acre parcels were deeded by the federal government under the Small Tract Act, one of the last of the government's homestead acts. The government's goal was to distribute 457,000 acres of desert that the Bureau of Land Management deemed disposable, most of it in California. By the time the act was repealed in 1976, about 36% of the land was privately owned. The rest is federally protected desert. Under amendments to the act, homesteaders were granted a deed only if they built a structure with dimensions not less than 20.5 No x 27.4 No (12 feet by 16 feet). No water or power was required for the homestead (Republic of Molossia Website 2017). Ironically, many, if not most of the homesteads failed in the first decade, in large part due to a reliable water source.

Based upon historic aerial photographs and topographic maps, between 1952 and 1957 a residential house appears to have been constructed on the adjacent parcel at 15401 Vista Road (APN 046-710-113). By 1968, the subject structure had been built or moved to its present location. By the 1970s, several outbuildings appear on topographic maps and other buildings were moved to different locations, forming the building complex to the west, accessed via Vista Road. Thus far there is no evidence to suggest the subject parcel was developed as part of the Small Parcel Act of 1938, but the impetus for development in this part of the desert was certainly aided by the act (Refer to BSO, Page 3 of 7).

B11. Additional Resource Attributes: N/A

B12. References: Feller, Walter. "National Old Trails Highway," http://digital-desert.com/historic-roads/national-trails.html, Accessed December 11, 2017; Gudde, Edwin G. *California Place Names*. Berkeley: University of California Press. 1969; Hatheway, Roger G. Cultural Resource Compliance Letter/Report: California U.S. Highway 66/National Trails Highway Emergency Washout Repairs, North of Helendale/Vista Road, San Bernardino County, California, 2016; Republic of Molossia Website. Republic of Molossia: Desert Homestead Province and National Monument, www.molossia.org/desert.html, accessed December 11, 2017; USDI, National Park Service. National Register of Historic Places Multiple Property Documentation Form for US Highway 66 in California, 2011; Hatheway, Roger G. Cultural Resource Compliance Letter/Report: California U.S. Highway 66/National Trails Highway Emergency Washout Repairs, North of Helendale/Vista Road, San Bernardino County, California, 2016.

B13. Remarks:

B14. Evaluator: Dana E. Supernowicz, Architectural Historian, 2001 Sheffield Drive, El Dorado Hills, CA 95762 **Date of Evaluation:** December 12, 2017

(This sp	ace reserved for	official comme	nts.)

Primary #: HRI#:

BUILDING, STRUCTURE, AND OBJECT RECORD

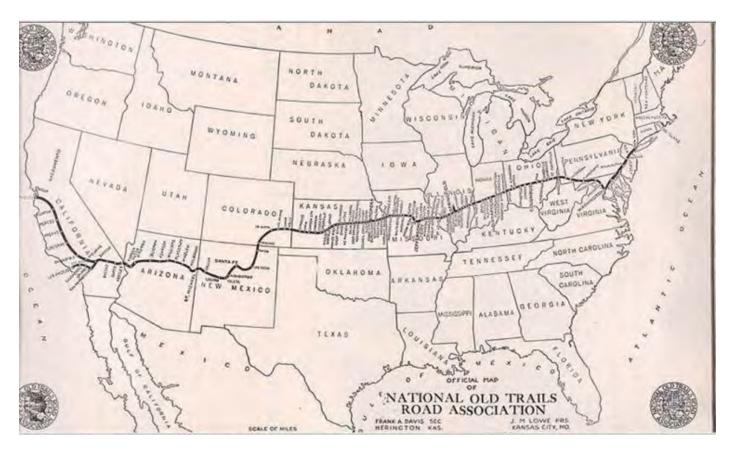
Page <u>3</u> of <u>7</u>

*Resource Name or #: 26426 National Trails Highway Shed

NRHP Status Code: 6Z

*B10. Significance: (Continued):

As previously noted another historic context associated with the subject property is transportation. Immediately east of the property is the National Trails Highway. Present-day Interstate 40 roughly follows the route of U.S. Highway 66, John Steinbeck's famous "mother road." The route developed initially as cross-desert motorists drove as close as possible to the Santa Fe Railway tracks, because the presence of settlements along the line made it easier to obtain supplies and help if needed. The alignment eventually became known as the "National Old Trails Road," or today as the National Trails Highway. The Automobile Club of Southern California placed signs along its route from Los Angeles to Kansas City in 1914 and produced maps of the road for motorists and to promote its use (Hatheway 2016).



Map of the National Old Trails Highway (www.cityprofiles.com).

Primary #: HRI#:

BUILDING, STRUCTURE, AND OBJECT RECORD

Page <u>4</u> of <u>7</u>

*Resource Name or #: 26426 National Trails Highway Shed

NRHP Status Code: 6Z

*B10. Significance: (Continued):

The route was designated U.S. Highway 66 in 1926, and paving through the Mohave Desert was completed in 1931 by state agencies, assisted by federal funds. The road was realigned several times; the initial route through Fenner and Goffs was bypassed in 1931 by a shorter route with a steeper grade. The federal government passed legislation in 1956 that called for the construction of a system of limited access, high speed, multiple lane interstate highways, which ultimately resulted in the construction of Interstate 40 that bypassed much of the National Old Trails Highway, which garnered its present name after 1985. Nostalgia for Route 66 has increased as the convenience and speed of the interstates has become a fixed part of American culture, and desert towns near the Mojave Preserve like Needles, Goffs, Essex, Amboy, and Barstow count Route 66-related tourism as a significant economic engine (Feller 2017).



Aerial Photograph 2017 (Google Earth). The red arrow points to the subject property.

Primary #: HRI#:

BUILDING, STRUCTURE, AND OBJECT RECORD

Page <u>5</u> of <u>7</u>

*Resource Name or #: 26426 National Trails Highway Shed

NRHP Status Code: 6Z

*B10. Significance: (Continued):

SIGNIFICANCE CRITERIA

The subject property was evaluated for the National Register and for the California Register of Historic Resources.

National Register of Historic Places (NRHP) Criteria

Criterion A: Event

Properties can be eligible for the National Register if they are associated with events that have made a significant contribution to the broad patterns of our history.

Criterion B: Person

Properties may be eligible for the National Register if they are associated with the lives of persons significant in our past.

Criterion C: Design/Construction

Properties may be eligible for the National Register if they embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

Criterion D: Information Potential

Properties may be eligible for the National Register if they have yielded, or may be likely to yield, information important in prehistory or history.

As the National Register points out, "when evaluated within its historic context, a property must be shown to be significant for one or more of the four Criteria for Evaluation - A, B, C, or D." The rationale for judging a property's significance and, ultimately, its eligibility under the Criteria is its historic context and integrity. The use of historic context allows a property to be properly evaluated in a variety of ways. The key to determining whether the characteristics or associations of a particular property are significant is to consider the property within its proper historic context (USDI, National Park Service. n.d.).

California Environmental Quality Act (CEQA) and California Register of Historic Resources (CRHR) Criteria

The regulatory framework for this historic resource evaluation lies within the guidelines imposed for the California Environmental Quality Act (CEQA) and the California Register of Historic Resources (CRHR) under Public Resources Code section 5024.1. CEQA guidelines define a significant cultural resource as "a resource listed in or eligible for listing on the CRHR. A historical resource may be eligible for inclusion in the CRHR if it:

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

Primary #: HRI#:

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 6 of 7 *Resource Name or #: 26426 National Trails Highway Shed

NRHP Status Code: 6Z

*B10. Significance: (Continued):

Even if a resource is not listed in, or determined eligible for listing in, the CRHR, the lead agency may consider the resource to be an "historical resource" for the purposes of CEQA provided that the lead agency determination is supported by substantial evidence (CEQA Guidelines 14 CCR 15064.5). According to the state guidelines, a project with an effect that may cause a substantial adverse change in the significance of a historical resource or a unique archaeological resource is a project that may have a significant effect on the environment (14 CCR 15064.5[b]). CEQA further states that a substantial adverse change in the significance of a resource means the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired. Actions that would materially impair the significance of a historical resource are any actions that would demolish or adversely alter those physical characteristics of a historical resource that convey its significance and qualify it for inclusion in the CRHR or in a local register or survey that meet the requirements of PRC 5020.1(k) and 5024.1(g).

In addition, the resource must retain integrity of location, design, setting, materials, workmanship, feeling and association. Factors to be considered include:

- a. a structure removed from its original location is eligible if it is significant primarily for its architectural value or it is the most important surviving structure associated with a historic person or event; and
- b. a birthplace or grave is eligible if it is that of a historical figure of outstanding importance and there is no other appropriate site or structure directly associated with his or her productive life.
- c. a reconstructed building is eligible if the reconstruction is historically accurate, if the structure is presented in a dignified manner as part of a restoration master plan; and if no other, original structure survives that has the same association.
- d. properties that are primarily commemorative in intent are eligible if design, age, tradition or symbolic value invest such properties with their own historical significance.
- e. properties achieving significance within the past fifty (50) years are eligible if such properties are of exceptional importance.

SIGNIFICANCE STATEMENT

The subject property, a modest wood or stick frame shed appears to have been reconstructed or moved to its present location in the late-1950s or most likely 1960s, when various improvements were made to 15401 Vista Road, a residential/commercial property located immediately to the west. It is also likely the two parcels were at one time combined in a larger parcel. The construction of the tank house shed appears to predate the other improvements on the adjacent parcel, providing additional evidence it was either reconstructed on the site or moved to its present location. The fact that the shed has a rather contemporary poured stem wall footing or foundation seems to confirm its relatively recent construction or reconstruction on the current site.

In order for a property to be significant under any criteria, it must retain integrity. The National Park Service, along with state and local agencies, define integrity as retaining location, design, setting, materials, workmanship, feeling, and association. In applying the definition of integrity to the subject property, the following findings are made below:

Location - The subject property retains its original location since the late 1950s or early 1960s, but may have moved to the present site from another nearby location or rebuilt on its present location.

Design - The subject property retains its original design, however, it is in extremely poor condition and the window frame and glass are missing, as is roof cladding.

Primary #: HRI#:

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 7 of 7 *Resource Name or #: 26426 National Trails Highway Shed

NRHP Status Code: 6Z

*B10. Significance: (Continued):

Setting - The setting of the property is largely intact, although the adjacent property has been modernized and expanded with new buildings and structures since the 1970s.

Materials – The structure retains most of its original materials, although in poor condition, with the exception of roof cladding and the only window in the building.

Workmanship - The workmanship of the structure is rudimentary or utilitarian, which is expected for a structure of this type and function.

Feeling - The feeling of the property is diminished, due to modernization of the nearby residence and business.

Association - The property's association has dramatically diminished, due to numerous alterations to the property to the west along Vista Road. Its association with the National Trails Highway remains the same.

APPLICATION OF THE SIGNIFICANCE CRITERIA

In summary, despite the fact that the subject property retains relatively good integrity of location, setting, design, materials, workmanship, feeling, and association, the subject property does not appear to be eligible for the NRHP nor CRHR, under any of the aforementioned criteria. This finding is based largely upon the property's overall lack of association with the National Trails Highway during its primary period of use, and, ultimately, significance to the motoring public.

Nor does the property have direct association with the Small Tracts Act of 1938. Although the property was once likely associated with 15401 Vista Road, this association is diminished, due to a parcel split and a variety of contemporary improvements to the Vista Road property. The pump house shed likely served the Vista Road property at one time, but was subsequently abandoned. In regards to NRHP Criterion D and CRHR Criterion 4, no evidence was found to support a finding that the property contains archaeological data of significance.

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Environmental Assessment Specialists, Inc.

71 San Marino Avenue Ventura CA 93003

Office (805) 650-0949 Fax (805) 650-8054 www.easenv.com

September 5, 2019

AT&T Mobility, LLC 1452 Edinger Avenue, 3rd Floor Tustin, CA 92780

Subject:

Cultural Resources Records Search and Site Visit Results for AT&T Mobility, LLC Candidate CSL04091 (Helendale Properties), North of Lakeview Drive and East of Monterey Road, Helendale, San Bernardino County, California (CASPR# 3551A0JZ5F)

At the request of AT&T Mobility, LLC (AT&T), EAS has conducted a cultural resources records search and site visit for AT&T candidate CSL04091 (Helendale Properties), located north of Lakeview Drive and East of Monterey Road, Helendale, CA 92342. The lease area lies in Section 36 of T.8N, R.5W (San Bernardino Baseline and Meridian) as shown on the USGS *Helendale, CA* 7.5-minute quadrangle map. AT&T proposes to install 12 panel antennas, 36 RRUs, 6 surge suppressors, and 1 2' diameter microwave antenna on a new 120' tall monopine. Equipment will be located within a new 20'-0"x 30'-0" equipment enclosure. The equipment enclosure will house 1 steel WIC equipment cabinet, 1 GPS antenna mounting on the shelter, 1 30-kw DC generator. Ground disturbance will be required for underground power and telco conduit, approximately 500' for telco and 790' for power.

The purpose of the record search is to identify all previously recorded cultural resources (prehistoric and historic archaeological sites, historic buildings, structures, objects, or districts) within the area of potential effect (APE), as required by Section 106 of the National Historic Preservation Act (NHPA) of 1966 and its implementing regulations, 36 CFR Part 800. It entails a review of all previously recorded prehistoric and historic archaeological sites situated within a half-mile radius of the candidate, as well as a review of all cultural resource survey/excavation reports. The purpose of the site visit is to determine the APE associated with the candidate. The lease area and the locations of planned project-related excavations (if any) were visited and photographed. The APE was established with reference to planned-for candidate construction methods, the existing topography and the current level of local urbanization

On August 1, 2019, Sarah Williams, M.A. conducted the cultural resources records search at the South Central Coastal Information Center (SCCIC), which is located at the California State University, Fullerton. To identify any historic properties on or near the candidate, we examined current inventories of the National Register of Historic Places (NR), the California Historical Landmarks (CHL), and the California Points of Historical Interest (CPHI). We also reviewed the California State Historic Resources Inventory (HRI) for San Bernardino County to determine any local resources that have been previously evaluated for historic significance. In addition, archival maps were inspected for indications of historical structures in the area.

Cultural Resources Records Search Results

The results of the records search indicate that two cultural resources have been recorded within the search radius (see Table 1 and 2). Eight area-specific survey reports are on file with the SCCIC for the search radius. None of these addressed the candidate location, suggesting the project area has not been previously surveyed for cultural resources (see Table 3).

Table 1: Known Cultural Resources Within a half-mile radius of the candidate location

Site Number	<u>Distance from the</u> <u>candidate</u>	Resource Description
P36-061218	2500 feet north	Isolate chert flake
P36-061216	2500 feet east	Isolate chert flake

Table 2: Structures or Features with a half-mile radius of the candidate location from the San Bernardino County HRI. NR. CR. CHL. and/or CHPI inventories

Address	Distance from the candidate	Resource Description
None		

Table 3: Known Cultural Resources Reports Within a half-mile radius that include the candidate location

NADB Report Number	Additional Details
None	

USGS Archival Topographic Map	Observations
1956 Helendale, CA 7.5'	The general area was undeveloped with one structure in the vicinity.
	Cultural resources are not depicted at the candidate location.

Cultural Sensitivity Based On The Record Search Data			
Historic	Low		
Prehistoric	Unknown		

Cultural Setting1

Four general, but distinctive cultural periods have been identified by Wallace (1955) for the prehistoric occupation of southern California (Early Hunter; Milling Stone; Intermediate; Late).

Early Hunter Period (before 6500 B.C.) sites are characterized by large projectile points and other stone implements adapted to chase big game animals. The large size and weight of the points suggest that the primary weapon for hunting was the dart, propelled by a spear thrower. The lack of grinding tools suggests that the inhabitants were not exploiting the plant foods to the extent that later cultures were. They were nomadic hunters, following the game throughout the seasons. Archaeological sites representing this early period are not common.

The Milling Stone Period (about 6500 B.C. to 1000 B.C.) represents a long period of time characterized by small, highly mobile groups of Native Americans. These groups probably had a seasonal round of settlement that included both inland and coastal residential bases. They relied primarily on grasses and seeds for food. Characteristic inland sites include numerous manos, metates, and hammerstones. Shell middens are more common at coastal sites.

Bean, L.J. and Charles R. Smith

1978 Serrano. In R.F. Heizer, (ed.) *Handbook of North American Indians, Vol. 8: California.* Pages 570- 574. Washington, D.C.: Smithsonian Institution.

Wallace, William J.

1955 A Suggested Chronology for Southern California Coastal Archeology. Southwestern Journal of Anthropology 11(3):214-230.

¹ References

The Intermediate Period occurred from approximately 1000 B.C. to A.D. 750. Mortars and pestles first appear in this period, indicating knowledge of acorn leaching. Use of the acorn probably permitted greater sedentism, especially at inland locations. Large projectile points suggest the use of spear throwers rather than the bow and arrow. Settlement patterns during this period are not well understood.

The Late Period (A.D. 750 to Historic Contact) saw a more semi-sedentary settlement pattern. Smaller projectile points suggest the introduction of the bow and arrow and less or no reliance on the spear thrower.

The Serrano

The Serrano are part of the Takic language family, which is a language group also shared, albeit distantly, by the Luiseno, Tongva, Cahuilla, and Cupeno tribal entities

Although it is difficult to ascribe a definitive boundary for the Serrano, the literature has suggested that this nationality had encompassed a vast and topographically varied area: the localities of eastern Los Angeles County, along the Cajon Pass to Victorville, to the far eastern reaches of Twentynine Palms, which is beyond the foothills of the San Bernardino Mountains, and to the southern extremities of the San Gorgonio Pass. As with most Native peoples, a typical village site would have been located within the accessibility of water and in areas that would provide a good shelter from the wind.

Establishment of APE and Cultural Resources Within

On August 13, 2019, Sarah Williams visited the candidate location to locate, define, and survey the APE (see Exhibit 1 and Exhibit 2). The APE was ascertained by examining the planned candidate construction methods, the existing topography, and the current level of urbanization. AT&T proposes to install 12 panel antennas, 36 RRUs, 6 surge suppressors, and 1 2' diameter microwave antenna on a new 120' tall monopine. Equipment will be located within a new 20'-0"x 30'-0" equipment enclosure. The equipment enclosure will house 1 steel WIC equipment cabinet, 1 GPS antenna mounting on the shelter, 1 30-kw DC generator. Ground disturbance will be required for underground power and telco conduit, approximately 500' for telco and 790' for power. Given these parameters, the direct APE is confined to the proposed telecommunications facility and the new trench route(s). The visual indirect APE is considered all that area within a ½-mile radius of those portions of the candidate once completed.

Direct APE Cultural Resources

The results of the site investigation confirm that no previously known cultural resources will be adversely affected by construction of the telecommunications facility. The candidate will be located along an existing dirt road in an undeveloped area of Helendale. The monopine and equipment locations are relatively undisturbed desert land, with some modern trash dumped in the area. Trenching will run south through Monterey Road to an existing pullbox for telco, while power continues until it turns at Lakeview Drive, to an existing Southern California Edison manhole located near the entrance to the Helendale Lakeview Tank Site. The soils have been partially disturbed during the grading of the roads, and heavily in the vicinity of the tank site. Soil visibility is good to moderate in most of the area, and poor for the trenching route near the tank site, with vegetation being the main obstruction in most of the area. A pedestrian survey of the proposed lease area did not reveal any pre-contact cultural materials.

Visual Indirect APE

The results of our records search indicate there are no NR eligible or listed historic resources located within ½ -mile of the candidate. The conditions are as follows:

- North, east, and west of the candidate location is undeveloped, relatively undisturbed desert land.
 Monterey Road runs to the west of the candidate location.
- South of the candidate location are minimally disturbed desert land and the Helendale Lakeview Tank Site. Beyond is a residential neighborhood.

Photographs are attached.

The topography in the vicinity of the candidate consists of relatively undisturbed land until you get into the residential neighborhood to the south. Surface visibility is good, with some plants obscuring visibility. Vegetation consists of plants in the creosote bush scrub community and non-native bushes, grasses and trees near the residential neighborhood. The nearest water source is the Fremont Wash, located approximately a half mile southeast of the candidate location.

Recommendations

The candidate is located in a relatively undeveloped area north of a residential neighborhood. No NR eligible or listed resources are within a half mile of the candidate location. Additionally, no other previously known cultural resources are located within 2000 feet of the candidate. Therefore, cultural resources will not be affected by the installation of the proposed telecommunications facility CSL04091.

We at EAS appreciate the opportunity to assist you on this project.

Sincerely,

mah d. Williams, M.A.
neologist Sarah A. Williams, M.A.

Archaeologist

Carrie D. Wills, M.A., RPA

Professional Archaeologist



Photograph 1: North facing view from the candidate location



Photograph 2: Northeast facing view from the candidate location



Photograph 3: East facing view from the candidate location



Photograph 4: Southeast facing view from the candidate location



Photograph 5: South facing view from the candidate location



Photograph 6: Southwest facing view from the candidate location



Photograph 7: West facing view from the candidate location



Photograph 8: Northwest facing view of the candidate location



Photograph 9: South facing view of the candidate location



Photograph 10: East facing view of the candidate location



Photograph 11: North facing view of the candidate location



Photograph 12: West facing view of the candidate location



Photograph 13: Southeast facing overview of the candidate location



Photograph 14: South facing view of the trenching route



Photograph 15: North facing view of the trenching route



Photograph 16: North facing view of the electrical trenching route

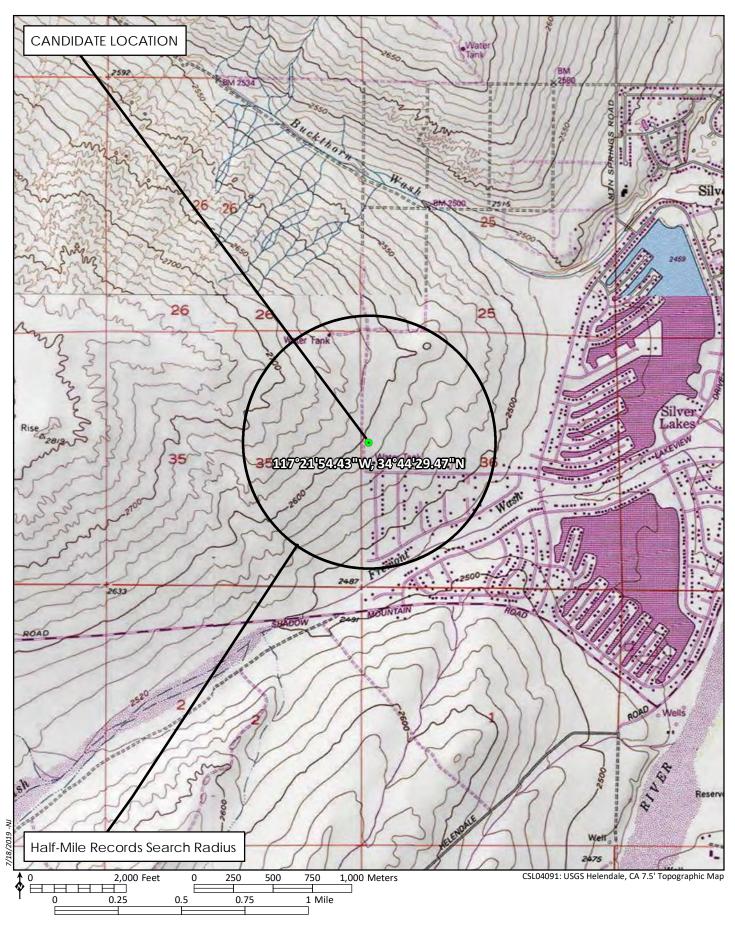
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Report List	List					
Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
SB-00166	NADB-R - 1060166; Voided - 73-7.1	1973	SAN BERNARDINO COUNTY MUSEUM ASSOCIATION	ARCHAEOLOGICAL SURVEY OF THE MOJAVE RIVER AQUEDUCT AND RECHARGE AREAS	SAN BERNARDINO COUNTY MUSEUM ASSOCIATION	36-000186, 36-000187, 36-000188, 36-000717, 36-000718, 36-000719, 36-000998, 36-000999, 36-002074, 36-002076
SB-02032	NADB-R - 1062032; Voided - 89-7.11	1989	YORK, ANDREW	ARCHAEOLOGICAL INVENTORY OF A PROPOSED FIBER OPTICS CABLE ROUTE BETWEEN RIDGECREST AND HELENDALE, CALIFORNIA	DAMES & MOORE	36-002076, 36-002256, 36-002257, 36-003033, 36-003384, 36-003385, 36-003389, 36-003390, 36-003391, 36-003392, 36-004022, 36-004024, 36-0040272, 36-004387, 36-004388, 36-004411, 36-005332, 36-005456, 36-005457, 36-005458, 36-005457, 36-005458, 36-005457, 36-005458, 36-005457, 36-005457, 36-005727, 36-005731
SB-02055	NADB-R - 1062055; Voided - 90-1.2	1990	1990 WHITE, ROBERT S.	AN ARCHAEOLOGICAL ASSESSMENT OF TT 13989: A 287-ACRE PARCEL NEAR HELENDALE, SAN BERNARDINO COUNTY	ARCHAEOLOGICAL ASSOCIATES	36-006573
SB-05292	NADB-R - 1065292	2004	CRUZ, MICHAEL	CULTURAL RESOURCES SURVEY OF THE PROPOSED HELENDALE CELLULAR TOWER SITE, MONTEREY ROAD, HELENDALE, SAN BERNARDINO COUNTY, CALIFORNIA		
SB-05434	NADB-R - 1065434	2005	2005 McKenna, Jeanette A.	A Phase I Cultural Resources Investigation of the Proposed Silber Mountain Estates Project Area (APNs 0465-631-016 thru 0465-631-24 in the Silver Lakes Area of San Bernardino County, California.	McKenna et al	
SB-05951		2007	Bonner, Wayne and Aislin-Kay, Marnie	Cultural Resource Records Search and Site Visit Results for T-Mobile Telecommunications Facility Candidate IE04836B (Springt/Nextel Colo) 26538 Lakeview Drive, Helendale, San Bernardino County, California	МВА	
SB-07169		2012	Billat, Lorna	Helendale Tower Collocation, Project Number LA5633A	EarthTouch	
SB-08156		2015	Fulton, Phil	Cultural Resource Assessment Class III Inventory	LSA Associates, Inc.	36-005292, 36-005951, 36-007169

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Exhibit 1
Street Map



OVERVIEW

- 20+ Years' Experience
- Master's degree, Anthropology California State University, Hayward
- Bachelor's degree, Anthropology California State University, Hayward
- Registered Professional Archaeologist #11138
- Meets Secretary of Interior's Standards for Archaeology

Carrie D. Wills, M.A., RPA, has been a Senior Project Archaeologist for the past 20+ years working at both prehistoric and historic sites. Ms. Wills has coordinated compliance efforts and trained teams ranging in size from 2 to 12 professional archaeologists/architectural historians in the complexities of small and large scale projects and managed their time and reviewed their reports prior to submittal. Some of the talents she brings to the table combine the ability to quickly and efficiently organize, evaluate, and complete numerous projects within stringent deadlines. Ms. Wills has consistently provided feasible solutions that protect significant resources while staying within budgetary constraints. Additionally, she has excellent communication skills and enjoys working and coordinating with co-workers, other scientists, and agency personnel. Ms. Wills has always been a self-starter and is personally and professionally motivated to ensure that each of the projects she works on adheres to the highest professional standards and is completed on time and within budget.

Ms. Wills has extensive experience managing projects that include pre-field assessments, archival research, pedestrian field surveys, site evaluation and testing, and data recovery and analysis for both prehistoric and historic projects. Her experience includes conducting field research, evaluating sites and features for historic significance and preparing reports that comply with the CEQA, Section 106 and NEPA.

Ms. Wills' management skills include writing proposals that reflect a concise understanding of the project objectives and provides the client with a reasonable budget and workable time frame. She has managed projects from the early planning stages (hiring crew members, coordinating transportation, hotels, and equipment) to organizing and assigning daily tasks and ensuring that the project stays on time and within budget. She has extensive experience coordinating with various agencies including USACE, BOR, and city and county governments. Perhaps one of her main strengths is her ability to organize, write, and edit comprehensive reports that meet all of the individual agency requirements, provide the most salient details about the project, and comply with CEQA, Section 106, and NEPA regulations.

In addition, Ms. Wills has conducted numerous consultations with Native American tribal representatives and government agencies and has good working relationships built on mutual trust and respect.

RELATED EXPERIENCE

The Conservation Center for Wildlife Care, Saratoga, Santa Clara County. At the request of the Peninsula Humane Society and SPCA, conducted a cultural resource investigation that included a NWIC record search and NAHC Sacred Lands File search, and a field survey, for the approximately 170 acre APE at the proposed Conservation Center for Wildlife Care located outside the City of Saratoga. In addition, coordinated with the project's architectural historian on the building/structure evaluations and recorded the structures on appropriate DPR forms. The final Section 106 report was presented to the USACE for submittal to the SHPO for concurrence with the Finding of No Adverse Effect.

Section 106 Assessment – DSRSD Central Dublin Recycled Water Distribution and Retrofit Project, City of Dublin, Alameda County, California. As project archaeologist/manager, conducted a cultural resource investigation that included record search reviews, historic map reviews, and a limited field survey of the proposed Central Dublin Recycled Water Distribution and Retrofit Project Area of Potential Effect (APE) that fulfilled the protocols associated with Section 106 of NHPA. The results of the investigation were submitted to archaeological staff at the Bureau of Reclamation and received concurrence with MBA's findings of effect.

Section 106 Assessment – Lake Solano Regional Park Visitor's Center Project, County of Solano. As project archaeologist, Ms. Wills conducted a cultural resource investigation that included record search reviews and a pedestrian field survey. As the project had a federal nexus, the work included a comprehensive report that met the criteria in Section 106 of the National Historic Preservation Act. The lead agency was the Bureau of Reclamation which has specific procedures that must be followed when unanticipated human remains or cultural resources are discovered. In addition to complying with the Bureau of Reclamation procedures, the results of the research and field survey were submitted to the State Historic Preservation Officer (SHPO) for concurrence with the stated recommendations.

Section 106 Assessment /HABS Documentation – *St. Regis Napa Valley Project, City of Napa, Napa County.* Served as the archaeologist for a historical and architectural analysis of a historic structure in the County of Napa. Following the evaluation of the historic significance of the structure and recording it to HABS standards, the results were sent to SHPO and received concurrence with the finding of no adverse effect to historic resources.

Section 106 Evaluation – *Dixon Veterans Memorial Hall Project and the Benicia Veterans Memorial Hall Project, County of Solano.* Served as the lead technical consultant for an analysis of two historic structures within the County of Solano. After evaluating and recording the buildings to Section 106 standards, the results were sent to SHPO and received concurrence with MBA's findings of no effect to historic resources.

Section 106 Evaluation – Solano County Free Library Center Project, County of Solano. Served as the lead technical consultant for a historical and architectural analysis of an historic structure in the County of Solano. Also served as the senior project archaeologist. After evaluating and recording the building to Section 106 standards, the results were sent to SHPO and received concurrence with MBA's findings of no effect to historic resources.

Section 106 Evaluation – Suisun Veterans Memorial Building Project, Suisun City. Served as the lead technical consultant for a historical and architectural analysis of an older structure in the City of Suisun City. After evaluating and recording the building to Section 106 standards, the results were sent to SHPO and received concurrence with MBA's findings of no effect to historic resources.

East Cypress Partners, LLC, Baldochi Project, City of Oakley, Contra Costa County. As lead archaeologist, conducted a cultural resource investigation that included a NWIC record search and NAHC Sacred Lands File search, and a field survey of the Baldocchi Project APE for East Cypress Partners, LLC. Totaling approximately 30 acres, the project included evaluation of a small homestead's buildings and structures for submittal to the Bureau of Reclamation who in turn submitted the findings to the State Historic Preservation Officer (SHPO) for concurrence.

Branciforte Project, Santa Cruz, CA. Ms. Wills conducted various tasks within an area considered highly sensitive for archaeological resources including developing an Archaeological Monitoring and Data Recovery Plan that detailed the treatment of the known archeological site during project development. To define the possible subsurface areas where unknown human remains may have been present, at the request of the City and the Native American monitor, the highly unusual procedure of using cadaver dogs to search the area was implemented. The excavated artifacts and resources are currently being analyzed, cataloged and prepared for curation and a comprehensive report is in the final stages of completion.

Bailey-Fellowes Dike Breach Assessment. As Project Manager, Ms. Wills conducted a feasibility study and estimated cost for breaching Fellows Dike at Calero Reservoir and relocating the CRHR eligible Bailey-Fellows House and eight other associated structures for the of Santa Clara Water District (District). The District chose two alternatives for analysis: one to repair the dike and retain the structures in place and the other to breach the dike and inundate the House and other buildings. Ms. Wills led a team of geologists, house moving companies, historic building designers, structural architects, and geologists, to analyze the two alternatives and provide the District with a feasible analysis to make their decision.

General Plan Update, County of Monterey. As senior project archaeologist, assisted in updating the General Plan with new policies including archaeological, historical, and paleontological resources. Tasks included a review of existing policies and suggestions for alternatives and updates relevant to current trends. Worked closely with Monterey County staff, agency personnel, and sub-consultants to ensure a high quality, timely Plan Update.

Historic American Buildings Survey Documentation – Larkspur 16.8-Acre Project, City of Larkspur, Marin County. Serving as project archaeologist, conducted a field survey, records and map review, and historic building evaluation for more than 20 buildings and structures associated with the circa 1920–1980 Niven Nursery in the City of Larkspur. The existing buildings and greenhouses that retained their historic integrity were evaluated for historic significance, recorded on appropriate Department of Parks and Recreation (DPR) forms, and documented to Historic American Building Survey (HABS) standards. Additionally, two prehistoric sites were previously recorded within the project area, and although neither of them was found during the pedestrian survey, to ensure site protection, construction monitoring was recommended during all ground-disturbing activities in these areas.

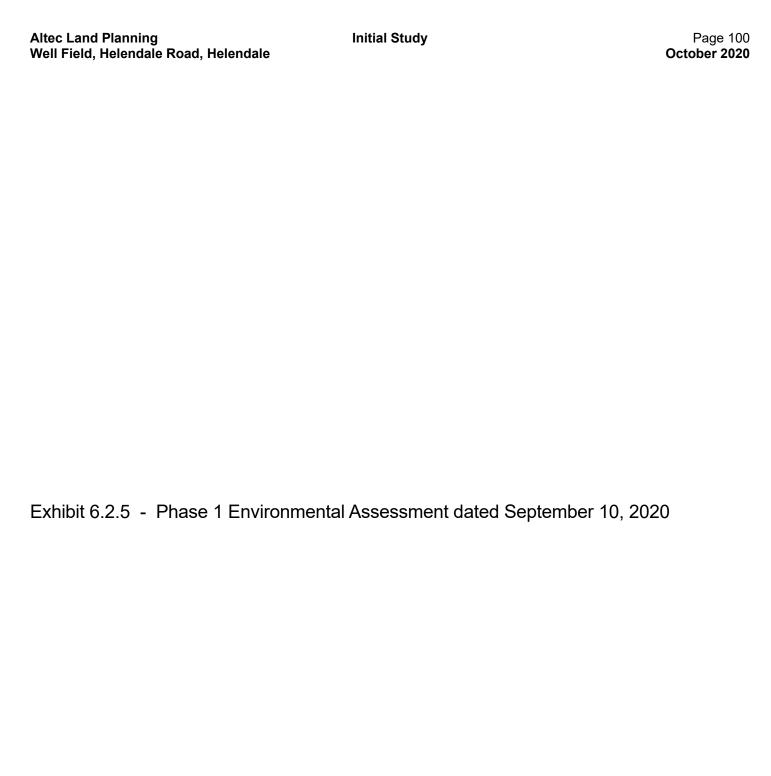
Historic American Buildings (HABS) Survey – KB Home Monte Vista, City of San Jose. Served as project manager for the KB Home Monte Vista Project. Conducted Historic American Buildings Survey Level III documentation for a large multistructure canning facility, Del Monte Plant #3, in San Jose. Tasks included producing over 200 large-format, black and white photographs of exterior and interior views of the existing structures. The MBA historic report augmented the photographic documentation by placing the structures within the appropriate historic context and addressing both the architectural and historical aspects of the site's significance. Specifically, the historical report focused on the Plant's contribution to the growth of the canning industry in San José. The plant was also assessed for historic significance and found to meet the criteria for listing on the National Register of Historic Places as a District along with two other local Del Monte canneries. MBA coordinated with state, federal, and city agencies including, but not limited to, City of San Jose Department of Planning and the National Park Service HABS/Historic American Engineering Record coordinator.

Cultural Resources Assessment – Zone 3A, Line D Capacity Improvements Project and Zone 5, Line A West Levee Improvements Projects, County of Alameda. Served as project manager and senior archaeologist, conducting a cultural resource assessment for the Zone 3A Line D Capacity Improvements Project, Hayward, and the Zone 5 Line A West Levee Improvements Project, Union City. The assessment consisted of record searches, review of historic literature, and more than 20 historic aerials to provide an understanding of development within the project areas and a historical context for the projects.

Telecommunications Projects – Most Northern CA Counties. Serving as senior project archaeologist, conducted record searches and map reviews, field surveys, historic building and ground disturbance evaluations, and authored compliance reports for SHPO submittal for over 1,000 telecommunications sites. Coordinated efforts with archaeologists, architectural historians, GIS co-workers, environmental firms, and numerous carriers including AT&T, T-Mobile, Sprint and Verizon.

PROFESSIONAL AFFILIATIONS

- Society for HistoricalArchaeology
- Society for California Archaeology
- Register of Professional Archaeologists #11138



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PHASE 1 ASSESSMENT: HELENDALE CSD NEW WELL FIELD, HELENDALE, CA 92345 - APN 0467-121-22&28

PHASE 1 ENVIRONMENTAL ASSESSMENT

43.08± (NET) ACRES AT 20675 HELENDALE ROAD **COMMUNITY OF HELENDALE, CA 92342**

ASSESSOR'S PARCEL NUMBER: 0467-121-22 & 28-0000

REPORT #: 1 AND 2 OF 2 - FOR CLIENT

AT THE REQUEST OF CLIENT

Helendale CSD

C/O DR. KIMBERLY COX, G.M. **16540 VISTA ROAD** HELENDALE, CA 92342 OFFICE: (760) 951-0006 KCOX@HELENDALECSD.ORG

PREPARED

© SEPTEMBER 2020

REPORT PREPARATION DATE: **SEPTEMBER 10, 2020 EFFECTIVE DATE OF REPORT: SEPTEMBER 10, 2020 EXPIRATION DATE OF REPORT: SEPTEMBER 10, 2021**

DISTRIBUTION: TWO (2) ORIGINALS TO CLIENT

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PHASE 1 ASSESSMENT: HELENDALE CSD NEW WELL FIELD, HELENDALE, CA 92345 - APN 0467-121-22&28

1.0 EXECUTIVE SUMMARY

The subject property (Site) consists of Vacant Land, Helendale Road and its logical extension on the west, Mojave River along the east, Daily Transit Mix, LLC and the "The California Desert Land Conservancy/Mojave Desert Land Trust (Older/Safari Ranch) on the south, as delineated by San Bernardino County Assessor Office records. The parcel(s) current owner is Carl E. Ross Living Trust 5 and consists of a total of 43.08± (net) acres [1,876,564 square feet) with existing road dedications on the west (legal and physical Helendale Road).APN 0467-121-22 & 28-0000. Numerous easements and a significant drainage course affect the Site. The Site is located in San Bernardino County and Unincorporated Community of Helendale and adjacent on the south of the Silver Lakes Community.

The Land Use and Development around the site includes the following:

	Land Use and Development	
Subject	HELENDALE COMMUNITY SERVICES DISTRICT (proposed owner)	
North	Helendale Road, Fallow Agricultural Land, Silver Lakes Community	
South	Native Vacant Desert and Mojave River	
East	Mojave River	
West	Helendale Road, Fallow Agricultural Land, Silver Lakes Community	

Discussion: The Site was visited September 10, 2020 and numerous previous site reviews for other consulting services for the existing property owners. The Site has never been known to be developed with previous historical operations (Agricultural, Commercial, Industrial or Mining uses).

Final Conclusions, Recommendations and Opinions

ALTEC's investigation has revealed no existing, new, or undocumented evidence of recognized environmental conditions or historical recognized environmental conditions associated with the Site, adjacent or nearby properties. This site and extended area along the Mojave River generally have a typical mix of historical (fallow) alfalfa ranches or vacant desert. The alfalfa ranches are almost all fallow along the Mojave River, at this time because the Water Rights were adjudicated in 1996 by the Mojave Water Agency Court Judgements and most Water Rights have been sold; some ranches have been converted to Photovoltaic facilities for State of California mandated "Alternative Energy" requirements.

Chain of Title:	Was not completed because the Site is vacant land for the last 50 years and does not have any known historical or pre-existing uses
Opinions:	None
Final Conclusion:	No known or unusual specific issues of environmental concern related to the Site, or adjacent uses or other up-gradient regional operations.
Recommendations:	ALTEC recommends no further investigations for the Site at this time.

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PHASE 1 ASSESSMENT: HELENDALE CSD NEW WELL FIELD, HELENDALE, CA 92345 - APN 0467-121-22&28

2.0 INTRODUCTION

2.1 Purpose

The purpose of this study was to assess the likelihood that potentially hazardous materials or wastes are present at or near or up-gradient from the subject property (the Site). For purposes of this report, the Site vicinity is defined as all property located within a 0.5-mile radius of the Site. Specifically, the movement of hazardous materials which are generally up-gradient from the south from underground water movement towards the north, its vadose zone or prevailing wind dispersion, all in the north-northeasterly direction paralleling the Mojave River.

2.2 Involved Parties

Consultant: Randolph J. Coleman has the following education, California licenses, and professional designations:

- 1980 B.S. in Environmental & Civil Engineering from University of California, Irvine
- 1982 Licensed Real Estate Broker #00836955 (NAR Designations: ALC, CCIM, CRB, CRS, GRI)
- 1983 Registered Civil Engineer #36293
- 1984 Licensed Land Surveyor #5413
- 1988 Licensed Contractor "A" and "B" General Engineering & Building (Not currently licensed)
- 1993 American Institute of Certified Planners #080546
- 1994 Registered Environmental Assessor #05791; program ended in 2013 (Cal-EPA-DTSC)
- 2007 Certified Arborist WE#-8024A by the International Society of Arboriculture
- 2010 Certified Wildlife Biologist #43090 by The Wildlife Society
- 2011 Certified Environmental Planner by the American Planning Association
- 2011 Qualified Stormwater Developer/Planner QSD/P #21595 by CASQA
- 2012 Scientific Collecting Permit #11586 by California Department of Fish and Wildlife
- 2014 Tree Risk Assessment Qualified TRAQ-WE#-8024A by the International Society of Arboriculture

ALTEC provides general land planning, environmental consulting, Phase 1 Reports, CEQA Initial Studies, Assessments (Native Plants, Fuel Modification, Biological for endangered species issues and Clearance Letters). This is in addition to typical civil engineering, land surveying, project/construction management and legal entitlement and permitting services for Federally Funded water systems, approval and construction of numerous school sites through the Department of Toxic Substance Control (DTSC), Dept. of Education (CDE) and funded by State Allocation Board for local School Districts and San Bernardino County Superintendent of Schools (Special Educational).

Proposed Property Owner/Operator:

Existing Property Owner:

Helendale Community Services District

Carl E. Ross Living Trust 5

2.3 The Scope of Work

- Site Inspection & Observation by a Registered Civil Engineer to observe and assess Site, adjacent properties, and vicinity characteristics of potential environmental concerns.
- Review of a regulatory agency database search and Site history/land use to identify potential uses that may have contributed to the presence of environmental concerns at the Site.
- Written Report for review by agents for the client (Proposed Property Owner and/or Attorney).

PHASE 1 ASSESSMENT: HELENDALE CSD NEW WELL FIELD, HELENDALE, CA 92345 - APN 0467-121-22&28

3.0 GENERAL SITE CHARACTERISTICS

The following is a list of Figures that will depict the site:

Figure	Purpose	
1	Regional Map	
2	USGS Maps - Current and Historical and soil information	
3	Aerial Photographs - Current and Historical	
4	Assessor's Map and Information Aerial Photograph with Assessor's Map overlay Ownership Information available from County Assessor's office	
5	Site Photographs	

3.1 Location

The Site is located in the RS zoned area (Residential Single Family) within the legal jurisdictional entitlement and permitting control by County of San Bernardino. Helendale CSD provides water, sewer and park and recreational services and various contractual agreements with San Bernardino County (i.e. Sherriff, Fire, Trash). This Project Site occupies the entire Site and the site has no perimeter fencing.

The Site is also located from the following major arterial corridors.

	Distance (Miles)	Major Arterial Corridors	
West	7±	Highway 395 [along Shadow Mountain Road (paved)]	
East	0.75	Route 66/National Trails Highway	
East	8±	Interstate 15 and the Dale Evans Parkway on/off-ramp	
North	14±	Highway 58	
South	15±	Highway 18	

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3.0 GENERAL SITE CHARACTERISTICS - continued

3.2 Adjacent Properties and Property Uses

The subject property (Site) presently consists of two -(2) legal parcels and consists of a total of $43.08\pm$ (net) acres with existing road dedication for Helendale Road along a portion of the western boundary, as delineated on the Assessor's Map.

The Site is located in the RS zoned area within the legal jurisdictional control of San Bernardino County and located in the Unincorporated Community of Helendale. The entire Site is vacant.

Adjacent Properties and Land Use around the site includes the following:

	Adjacent Properties and Property Uses	
Subject	HELENDALE COMMUNITY SERVICES DISTRICT (proposed owner)	
North	Helendale Road, Fallow Agricultural Land, Silver Lakes Community	
South	Native Vacant Desert and Mojave River	
East	Mojave River	
West	Helendale Road, Fallow Agricultural Land, Silver Lakes Community	

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4.0 ENVIRONMENTAL SETTING

4.1 Regional Physiographic and Geologic Conditions

The Site is located within the Mojave Desert Geomorphic Province, a large structural block of land bounded on the southwest by the San Andreas Fault; on the north and northwest by the Garlock fault, the Tehachapi Mountains and the Basin and Range Province; and on the southeast by the Colorado Desert. The Mojave Desert Province also extends eastward into Arizona and southern Nevada and southeastern corner of Utah. Much of the topographical relief of the Mojave Desert represents remnants of mountainous topography, now partially or wholly obscured by erosion and alluvial cover.

The greater Victor Valley area and specifically the Helendale community is in the southwestern portion of the Mojave Desert and drains into the Mojave River. For example, the Palmdale/Lancaster area is at the southwestern edge and drains into Rosamond Dry Lake and the City of Needles is essentially near the eastern edge of the Mojave Desert and drains into the Colorado River. This famous Basin and Range Province of the southwest United States and ultimately are part of the Death Valley drainage complex. In the contiguous U.S., Mount Whitney's summit is the highest at 14,505 feet and is 84.6 miles west-northwest of the lowest at Badwater in Death Valley National Park (-282 feet below sea level). Along with the Great Salt Lake in Utah and Pyramid Lake in Nevada, this Basin and Range Province spans 300,000± square miles and includes almost all of Nevada, western Utah, southeastern California, and portions of Arizona and northwestern Mexico.

The Tehachapi Mountains to the west further bifurcates the Mojave Desert from the Central Valley. Additionally, the Mojave Desert is comprised of numerous valleys and transmontane ranges or sky islands (i.e. New York Mountains, White Mountains, Sandia Mountains, San Francisco Peaks and the Telescope Peak in the Panamint Range to the west of Death Valley has an elevation of 11,050 feet) that create dramatic biological and geological diversity for plants, animals and mineral resources.

The Transverse Mountain Ranges (east-west orientation, being transverse to the north-south orientation of California coastal mountain and Sierra ranges) at Cajon Pass (Interstate 15) are divided with the San Gabriel Mountains to the west and the San Bernardino Mountains to the east. These two mountain ranges begin the western edge of the basin and range system and provide the source of the clear majority (5 major of 18+/- ice-age cycles) of ground water aquifers and current surface flooding during storm events for potential aquifer recharge as numerous creeks and the Mojave River drain off the northern side of these mountain ranges. These mountain ranges create the rain shadow effect on the Mojave Desert that reduces the amount of moisture from storms, and additionally the Mojave Desert is distinguish by the large alluvial fans into the greater Mojave from all mountain ranges.

The subject site is about 5 miles southerly of the Helendale Fault, and the famous San Andreas Fault that can create a significant earthquake is southerly about 30 miles, and issues of concern are below.

• **Liquefaction** is the loss of soil strength because of an increase in pore water pressure due to dynamic earthquake loading. Conditions for liquefaction to occur generally include relatively high water table (within 40 feet of the ground surface), low relative densities of the saturated soils, and a susceptibility of the soil to liquefy based on grain size. Research indicates the groundwater varies greatly depending upon localized conditions, being less than or greater than 40 feet, the soil sequence is predominantly in a relatively medium-dense state, hence the potential for on-site liquefaction is considered potentially significant along the eastern edges of the Site.

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4.0 ENVIRONMENTAL SETTINGS - continued

• Landslides are the downslope movement of geologic materials. The majority of the Site is relatively flat terrain where landslides do not occur; therefore, impacts are considered less than significant with respect to seismic-related (or other) landslide hazards. It is noted the eastern edge of the Site is the bluff area adjacent to the Mojave River.

Riparian area of the Mojave River is located adjacent to and to about 600 feet east of the Site.

Native Mojave Desert Vegetation remains on vacant parcels in the undisturbed areas, including Mojave Scrub with Creosote and other perennial bushes and annuals.

Earthquake Fault Zone and Seismic Hazard Maps per the California Alquist-Priolo, California Department of Conservation, USGS Fault Maps; identify the nearest faults approximately as shown.

Per the USGS Earthquake Hazards Program the nearest faults are delineated below. The probably of this fault releasing enough energy to cause significant-damage near the site is considered negligible.

Fault	Location
SITE	Not located within a California Alquist-Priolo Fault Zone
San Andreas Fault	30± miles southerly in the Cajon Pass area of Interstate 15
Helendale Faults	5± miles northeasterly

SUBSURFACE SETTING

There were no subsurface exploration(s) on the Project Site. However, multiple Well Sites are located along the western edge and the east edge of the Site. Generally, the soil sequence consists of sandy loams to coarse grained gravelly sand with cobbles. This is consistent with what is to be expected based upon other studies that have been performed in the general area. The in-situ density results indicate that the subsurface soils at the site are generally medium-dense state.

The Groundwater Surface along the Mojave River is at or near the River ground surface (2,456± MSL) at the southwest corner of the Site. The Ground Surface of the Site is 2,472± MSL near the Southwest corner and MSL 2,461± MSL near the Northeast corner of the Site.

Mojave River Note: Groundwater depth varies greatly within the Mojave Desert depending upon exact location within some specific aquifer basins and exact well location due to above and below surface rock formations, high localized pumping rates, historical and current agricultural uses, active faults with dramatic differential from one side to the other; the faults essentially create a below surface damning affect or surface springs, such as locations along the Mojave River (Deep Creek, Upper and Lower Narrows, Oro Grande/Helendale area, Afton Canyon) and other scattered smaller spring locations (i.e. Old Woman Springs) scattered throughout the Mojave Desert region.

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4.0 ENVIRONMENTAL SETTINGS - continued

Generally, the areal geology in local desert soils are described as sands, silts, and gravelly sands formed from "Alluvium Deposits" derived dominantly from granitic materials, soils unique to active drainage areas. This very deep and excessively drained soil is on alluvial fans from the nearby transmontane ranges within the boundaries of the Mojave Desert.

Generally, alluvial soils are typically subject to erosion by wind and storm waters when disturbed. These are soils with high to moderate potential for water erosion includes these soil types. Soil controls such as limited grading, creation of impermeable surfaces, establishment of windbreaks and other erosion control techniques are advisable to protect these fragile desert topsoil layers from both water and wind erosion.

Ground Water Conditions

The community obtains its water supply from the underground aquifers along the Mojave River.

There are no known springs or perched groundwater conditions at the Site. Groundwater is of good quality with all drinking water standards met and water and wastewater services are provided by the Helendale CSD.

Seismically Related Flooding:

Another seismically related hazard is earthquake induced flooding and includes tsunamis, seiches and reservoir failure. Due to the inland location of the site, hazards due to tsunamis are considered unlikely. The Mojave River is adjacent to the east.

4.2 Annual Rainfall 4± inches per year.

4.3 Soil Conditions

The Site has four –(4) native soil types consisting of a variety of Sandy Loams which are well-drainage (have high percolation rates). Generally, all these local desert soils described are sands and gravelly sands formed from alluvium derived dominantly from granitic materials, soils unique to active drainage areas. This very deep, somewhat excessively drained soil is on alluvial fans from the nearby San Bernardino and San Gabriel Mountain along with other transmontane ranges within the Mojave Desert.

Generally, alluvial soils are typically subject to erosion by wind and storm waters when disturbed. These are soils with high to moderate potential for water erosion includes these soil types. Soil controls such as limited grading, creation of impermeable surfaces, establishment of windbreaks and other erosion control techniques are advisable to protect these fragile desert topsoil layers from both water and wind erosion.

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4.0 ENVIRONMENTAL SETTING - continued

4.4 Ground Water Conditions

The community obtains its water supply from the underground aquifer and is within the Mojave Water Agency and the Adjudicated Water Rights, along with a large variety of related and supplement Laws and Regulations.

NOTE: Attempting to attain some type of written verification from Lahontan RWQCB, in the past, has taken approximately 90 days for non-typical gas station or similar sites.

NOTE: The Mojave Water Agency, which monitors water-rights ownership and use. In 1991, Riverside County Superior Court Case No. 211504 was an Original Judgment, which has been amended and expanded. The Water Supply has been supplemented with the nearby available water rights from the California State Water Project where the local agencies have a pipeline delivering water to the communities from the California Aqueduct turn-out in the Hesperia Community and traveling eastward under the authority and control of the Mojave Water Agency, the regional water agency. The Mojave Water Agency and the Water Master create yearly reports for the Court to review to indicate if the various groundwater basins within the Mojave Water Agency are in balance and other legal requirements.

There are no known springs or perched groundwater conditions at the Site, excluding the Mojave River riparian corridor. Groundwater is of good quality with all drinking water standards met.

4.5 **Depth to Groundwater** 0 - 75± feet estimate - Varies on the Site and greatly depending upon location of within the specific aquifer basin and exact well location due to above and below surface rock formations, numerous active faults in the general area and dramatic differential from one side to the other of the faults essentially create a below surface damning affect or surface springs, such as the Old Woman Springs and other scattered spring locations scattered throughout the Mojave Desert region.

Ground Elevation at about 2,481± feet MSL. (EDR Report) per United States Geological Survey Areal Geology: Alluvium Deposits.

4.6 Certified Sanborn Maps Provided no relevant or additional information

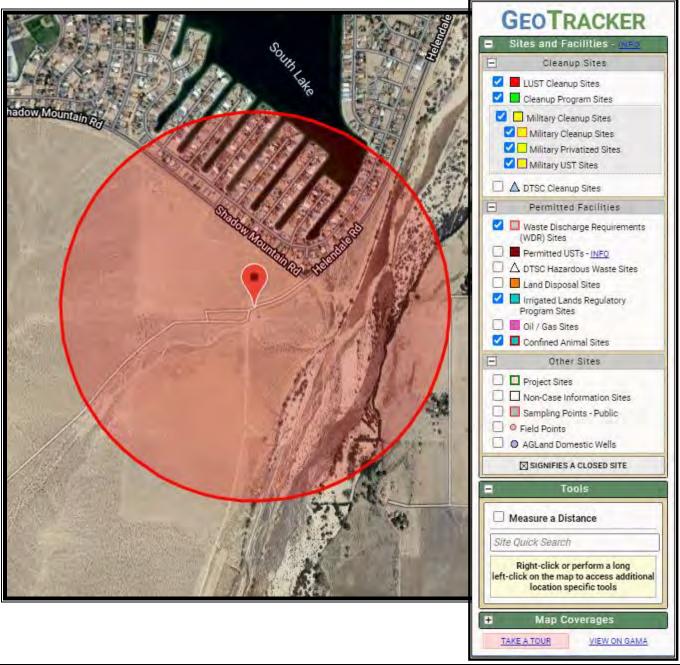
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4.0 ENVIRONMENTAL SETTING - continued

4.7 GeoTracker system operated by the State Water Quality Control Board

(http://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=Landers%2C+CA#)

Indicates no businesses or hazardous issues within 0.5 miles. Reviewing this Website provided no relevant or additional information not already within the EDR Report.



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5.0 RESULTS OF INVESTIGATION

5.1 Site Inspection Observations

Specifically, on September 10, 2020, Randolph J. Coleman conducted a vehicular inspection of the Site, water wells and the school site that were in the EDR Report and nearby surrounding areas.

The Site remains native desert outside the numerous easements and access roads.

The historical USGS quad sheets and aerial photographs did not indicate other historical uses. I have personally been on the Older/Safari Ranch numerous times, both casually and performing various consulting services with the current and previous owner since the 1970's.

There are no apparent encroachments of existing improvements (see Photographs and Aerial Photograph).

During the vehicular inspection along perimeter and interior dirt roads and specifically along downstream gradient portions of the Site for specific observations of non-natural colored soils, soils without native forbs and other abnormal plant growth patterns, or invasive weed and plant growth indicating some type of shallow-surface soil contamination corresponding to an issue of potential concern was not found. Site photographs and historical aerial photographs are in Addenda.

No observations of current "Nuisance Water" (urban drool) from upstream development landscaping draining onto or near the Site. This is a typical occurrence downstream and subsequent to new development. Numerous utility easements were observed on and adjacent to the Site. Utilities for any specific proposed development would need to be verified independently. Current California drought issues will probably minimize these issues in future.

No 500 kV or smaller Transmission lines are located on the Site, but generally criss-cross the Mojave Desert. Thousands of new homes have been built in the greater Victor Valley area since the 1980's and many are adjacent and nearby these 500 kV lines in the Cities of Adelanto, Victorville and Hesperia with no specific impact to sales or valuations.

There are no site improvements on the site.

Subject	HELENDALE COMMUNITY SERVICES DISTRICT (proposed owner)	
North	Helendale Road, Fallow Agricultural Land, Silver Lakes Community	
South	Native Vacant Desert and Mojave River	
East	Mojave River	
West	Helendale Road, Fallow Agricultural Land, Silver Lakes Community	

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5.0 RESULTS OF INVESTIGATION - continued

5.1 Site Inspection Observations – continued

	Site Inspection Observations Summary:		
Present Activities	Vacant Desert		
Past Activities	The site is vacant desert with no perimeter fencing and has no historical agricultural, mining, commercial, or industrial activities known to be performed on the site.		
Asbestos	No evidence of specific asbestos uses or activities existing on the site. No "Asbestos Containing Materials" (ACM's) were observed. No Transite Water Pipe observed.		
Underground Storage Tanks	EDR Report does not indicate any historical above-ground or underground storage tanks. Additionally, there was no apparent historical leaking onto shallow surface soils observable during the vehicular inspection.		
Leaks and Spills	No evidence of major leaks or spills observed during the inspection. NOTE: The site has adequate natural on-site stormwater runoff that allows native desert annuals and invasive plant species of weeds (i.e. Bromus sp., Schismus, Saharan Mustard, Russian Thistle) to be growing within the down-gradient Site perimeter that would indicate adequate evidence of NO poisoned shallow sub-surface soils within the root zone and/or additional discolored surface soils.		
Agricultural	No evidence of historical agricultural activities existing on the site.		
Mining	No evidence of historical mining activities existing on the site.		
Residential	No evidence of historical residential activities existing on the site.		
Commercial	No evidence of historical commercial activities existing on the site.		
Industrial	No evidence of historical industrial activities existing on the site.		
Gas Stations	No evidence of historical Gas Station activities existing on the site.		
Summary	No adverse environmental conditions observed during the Site inspection.		

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5.0 RESULTS OF INVESTIGATION - continued

5.2 Adjacent Site and Vicinity Observations

The site is 100% vacant with numerous easements and the general area has scattered development and vacant desert and fallow alfalfa field.

5.3 Results of Regulatory Agency List Review and File Research

Environmental Data Resources Inc. (ERD Report) to provide a report with a list of facilities within the vicinity currently under review, management, or notification by various regulatory agencies was ordered, reviewed, and made a part of this Phase 1 Assessment.

The site is not "Geocoded" within the EDR Report.

Leaking Underground Storage Tanks (LUST) list and Cortese list: This is a list that compiles the State Water Resources Control Board (SWRCB) and Regional Water Quality Control Board (RWQCB) identified facilities that have had unauthorized releases from UST's and non-tank spills in the area.

A review of the list has revealed that there are **0** sites within approximately 0.5 miles of the target property.

Historical Underground Storage Tanks (HIST UST): This is a list of **Historical** underground storage tanks.

A review of the list has revealed that there are **0** sites within approximately 0.5 miles of the target property.

Local Lists of Registered Storage Tanks: CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board. A review of the CA FID UST list, as provided by EDR, has revealed the following:

A review of the list has revealed that there are **0** sites within approximately 0.5 miles of the target property.

Clandestine Drug Labs (CDL): This is a list of illegal drugs and/or laboratory equipment locations.

A review of the list has revealed that there are **0** sites within approximately 0.5 miles of the target property.

State Environmental Evaluation and Planning System (SWEEPS UST): 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 list has revealed that there are **0** sites within approximately 0.5 miles of the target property.

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5.0 RESULTS OF INVESTIGATION - continued

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 the following:

A review of the list has revealed that there are **0** sites within approximately 0.5 miles of the target property.

HAZNET: Is a list of manifests from copies of Hazardous waste from Dept. of Toxic Substances Control (DTSC)

A review of the list has revealed that there are **0** sites within approximately 0.5 miles of the target property.

The United States Environmental Protection Agency (EPA), National Priority List (NPL): is a listing of hazardous waste generators that are, or proposed to be, EPA-enforced Superfund sites.

A review of the list has revealed that there are **0** sites within approximately 0.5 miles of the target property.

Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS): is a listing of facilities which represent environmental concerns from the discharge of hazardous materials by hazardous waste generators, treatment and storage facilities, and hazardous waste disposal facilities. The listing includes sites subject to investigation under the state superfund program and federal Comprehensive Environmental Response Compensation and Liability Act (CERCLA) programs.

A review of the list has revealed that there are **0** sites within approximately 0.5 miles of the target property.

Resource Conservation and Recovery (RCRA): is a list maintained by the EPA which identifies waste generators, treatment, and disposal facilities. The purpose of this listing is to summarize registration of Hazardous Waste Generators and does not imply that contamination has occurred on the property but does identify potential sources of contamination. No cases were identified on the RCRA within a 1/2-mile radius of the Site.

A review of the list has revealed that there are **0** sites within approximately 0.5 miles of the target property.

Waste Discharge Systems (WDS): This contains information on sites, which have been issued waste discharge requirements.

A review of the list has revealed that there are **0** sites within approximately 0.5 miles of the target property.

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5.0 RESULTS OF INVESTIGATION - continued

5.4 Site History/Land Use Review

Aerial and Site photographs of the Site and vicinity reviewed in order to ascertain historical land uses that may have been responsible for the generation or storage of potentially hazardous materials. Photographs are in the Addenda.

Photo Date	Site Description	
1953 thru 2016 South Parcel is Vacant Desert.		
1953 thru 1968	North Parcel is part of original Alfalfa Ranch prior to development of the Silver Lakes Master Planned Community.	
1973 thru 2016	North Parcel is vacant an adjacent to the Silver Lakes Community	

5.5 Synopsis of Previous Environmental or other Investigations

No known previous environmental assessments for this site, however I have personally reviewed nearby sites, both up-gradient and down-gradient, for various purposes (i.e. CEQA Initial Studies, Phase 1 Environmental Assessments, Real Estate Brokerage, Construction Management and Inspections, Appraisals, Biological Baseline and Native Plant Assessments and various Letter Clearances) since the 1981 and Civil Engineering, Land Surveying since 1976.

5.6 Suspect Native Minerals (Serpentine Rock – i.e. Asbestos or Tremolite)

No suspect serpentine rock formation at, near or upstream gradient from the Site.

5.7 Suspect Asbestos Containing Materials Observations

The Site currently is a remnant portion of the Older/Safari Ranch (Vacant Desert with numerous easement) and is proposed for purchase by the HELENDALE COMMUNITY SERVICES DISTRICT for a Water Well Field for long term planning purposes. The Site has no known historical mining, agricultural or commercial/industrial operations. There was no observable asbestos containing materials (ACM's) from building materials and no observable materials (i.e. Transite Pipe) were on the Site.

5.8 Railroad Corridors and Alignments (Existing or Historical)

No railroad corridor or alignments are adjacent to the Site presently, in the past or proposed. The railroad corridor is on the east side of the Mojave River.

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5.0 RESULTS OF INVESTIGATION - continued

5.9 District Attorney, FBI, and other potential Governmental Investigations

Coleman has been previously contacted by the FBI, Resolution Trust Corporation (1989-1997 era), Federal Deposit Insurance Corporation (FDIC 2004-2007 era), San Bernardino Sheriff's, San Bernardino County Fire Department and District Attorney's office relating to the following:

- Hazardous Material issues
- FDIC Loan issues
- Review of Sites with probable arson fires
- Appraisal Fraud issues

Real Estate Appraisals

Land Surveying

- Real Estate Fraud incidents
- Stolen Property

Coleman has provided Expert Witness services in San Bernardino County Superior Court regarding real estate issues in the Victor Valley numerous times and U.S. Federal Bankruptcy Court, as follows:

- Civil Engineering
- Environmental Engineering
- Real Estate Brokerage issues
- Easements and potential associated Rights-of-Way and related purposes
- Southern California Association of Governments (SCAG) Regional Transportation Plans and Planning and associated Rights-of-Way purposes for the proposed E-220 alignment.
- Jurisdictional Approvals and various Planning issues and requirements for proposed projects

No public information is available because these investigations are confidential until these agencies (i.e. FBI, District Attorney, or the Criminal Investigation Division [CID] of FDIC and IRS) starts legal action, which then makes this information public. Generally, this site is not within an industrial zoned area or industrial park and has no characteristics that would indicate an additional potential or negatively affected by hazardous conditions from nearby sites or upstream gradient contamination.

Industrial Parks and industrial users, commercial corridors and other commercial, medical, and general office uses do contain, and subject to rapid change, a variety of businesses, which operate with a variety of hazardous and biological hazardous materials. Ongoing investigations by the following:

- Federal, State and City agencies
- San Bernardino County
 - Special Districts
 - Code Enforcement

- Fire Department
- District Attorney
- California Water Quality Control Board Lahontan Region
- Mojave Desert Air Quality Management District
- Local and regional governmental organizations are not public information until charges are filed.

In conclusion, the parameters of these non-typical hazardous material incidents have little probability of occurrence at this site and at this time. However, new industrially oriented development can change this potential issue and no consideration will be given to this potential situation.

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6.0 CONCLUSIONS AND RECOMMENDATIONS

The Site is vacant desert with numerous easements. The Site has no known prior historical mining, agricultural or commercial/industrial operations. There are no additional issues of environmental concern related to the site or up-gradient adjacent or regional uses or operations. The following is a summary of the conclusions:

Elements of Concern	No Apparent Concern	Potential Concern
Site and Land Use Issues		
Agricultural Uses Herbicides (nearby wells regularly tested) Pesticides (nearby wells regularly tested)	X X	NO because of the general testing completed by the local Water Purveyor, Mojave Water Agency, USGS and others
Air Emissions	X	
Asbestos	X	No materials testing completed
Mining Activities	X	
District Attorney Investigations	Х	
GeoTracker GIS program by SWQCB	X	None -See in Addenda
Native Minerals (Serpentine Rock)	Х	
PCB's (in old transformers, fluorescent ballasts)	Х	
Radon	X	
Regional Land Use Problems	X	
Regulatory Actions	X	Appear to be in Compliance
Adjacent Site and Land Issues	X	
Solid Waste or Hazardous Waste Issues Generation Storage Other	X X X	
Storage Tanks Above-Ground Below-Ground (historical) Drums [55 Gal. or other containers]	X X X	Appear to be in Compliance
Wastewater Issues (nearby wells tested)	X	
Water Supply Issues (wells regularly tested)	X	

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6.0 CONCLUSIONS AND RECOMMENDATIONS - continued

The Site currently is a remnant portion of the Older/Safari Ranch (Vacant Desert with numerous easement) and is proposed for purchase by the HELENDALE COMMUNITY SERVICES DISTRICT for a Water Well Field for long term planning purposes. The Site has no known historical mining, agricultural or commercial/industrial operations. There are no observable issues of environmental concern related to the site, adjacent or regional operations. There are still adjacent and nearby areas that are essentially native desert (to the south and west)and the Mojave River to the east.

The neighborhood has typical numbers of government documentation for the variety of uses near the Site and these uses are relatively newer indicating a robust ongoing review and analysis of the general area. No significant issues found during the records research process and the use of historical underground storage tank(s) [UST's] for fuel was common in this area and these UST's have been systematically removed. If leaking had occurred, it would have shown up during the regular well and water testing activities of the area.

No other known issues of environmental concern related to the Site, or adjacent uses or other regional site operations. While there are no observed issues of concern appearing at this time, Site and vicinity conditions may change over time. In the future, on-site and off-site sources of environmental concern may impact the Site. It is our opinion that there is very-little chance of such impact at this time and foreseeable future.

Due to changing conditions and expansion of the operations on the Site or immediately adjacent site to that are up-gradient, the following recommendations for any future storage tanks may be applicable.

To alleviate any potential hazardous material release from any storage tanks or other potentially hazardous products should require storage tanks and systems with the following attributes and subsequent state-of-the-art systems to safeguard against potential soil and groundwater contamination occurring from the following:

	Attributes of System	Attributes of Safeguards
Tanks	Above Ground Tanks and being a Double Walled design	Leaking Storage Tanks is visible
Piping System	Doubled Walled design Piping Distribution Systems	Leaking Piping Distribution Systems will be indicated by the Annulus Leak Detector
Leak Detection	Annulus Leak Detector System (Monitoring System)	Leaking Piping System connecting to Tanks and Dispensers
Refilling	Fuel Tank Supply (Refilling) Containment Boxes.	Spilling occurring from refilling of Storage Tanks.
Dispenser	Dispenser Containment Boxes, if applicable.	Spilling occurring from dispensers, if applicable.

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California Licenses: Civil Engineer #36293, Land Surveyor #5413, QSD/P #21595, CDFW: Scientific Collecting Permit #

PHASE 1 ASSESSMENT: HELENDALE CSD NEW WELL FIELD, HELENDALE, CA 92345 - APN 0467-121-22&28

7.0 LIMITATIONS

The conclusions and recommendations presented above are based upon the scope of work outlined in the above report. Consultant makes no warranties or guarantees as to the accuracy or completeness of information obtained from, or compiled by others, which is specifically numerous governmental (Federal, State, Regional, County and Local jurisdictions) agencies. It is possible that information exists beyond the scope of this investigation.

Note: Significant geological activity (numerous large and small earthquake faults) has created the Mojave Desert Bioregion and this geological activity will continue to shape the desert surface and surrounding mountain ranges. These tremendous weather changes in the Mojave Desert Bioregion have occurred numerous times during the last (5 major) 20± ice-age events with enormous variations in rainfall, temperature, water usage and variations in the animal and plant life. This geological activity has created extremely rich mining activity throughout the Mojave Desert and some of these minerals are very-important for military and high-technology equipment (Lanthanides) or hazardous, even in their native state (i.e. Asbestos, Tremolite, Fluorides, Chromium -3 & 6).

"Anthropogenic" Global Climate Change issues will continue to shape public policy.

Additionally, economic, local, county, regional, state, and federal political policy, and other factors change regularly creating additional challenges and issues of concern in the future, which are unknown at this time. Additional information not found or available to the Consultant, at the time of Report writing, may result in a modification of the conclusions and recommendations presented.

This report is not a legal opinion and is intended for exclusive use by the CLIENT AND LENDER ONLY. The report must have a wet signature and stamp in original ink, non-copied, to be an authorized copy of this report. If this is not a signed original, this copy is unauthorized. Current testing requirement thresholds and the creation of new testing threshold requirements and standards are probable for the foreseeable future (i.e. relatively recent new Chromium thresholds and lower arsenic thresholds).

Please review the complete Phase 1 Environmental Site Assessment in its entirety to better understand the conclusions presented. ALTEC appreciates the opportunity to furnish this Assessment.

Please do not hesitate to contact us if you have any questions or request additional services.

Respectfully submitted,

ORIGINAL SIGNATURE, STAMP & PDF CREATED ON SEPTEMBER 11, 2020

Randolph J. Coleman.

DATE

Licensed Real Estate Broker #836955 (1982) Expires 10/28/2023 Registered Civil Engineer #36293, (1983) Expires 06-30-2022

Licensed Land Surveyor #5413, (1984) Expires 09-30-2022

American Institute of Certified Planners (1993) & Certified Environmental Planner (2011) Expires 12-31-2020

Certified Arborist WE#-8024A by the International Society of Arboriculture (2007) Expires 12-31-2021

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PHASE 1 ASSESSMENT: HELENDALE CSD NEW WELL FIELD, HELENDALE, CA 92345 - APN 0467-121-22&28

8.0 REFERENCES

EDR, Inc. - Report ID located in the Addenda

Community of Helendale: Misc. Information:

Title Report: Provided

No 50-Year Title Search was completed

Property has been owned by Carl Ross and previously by Mr. & Mrs. Robert Older for over the previous 50 years. I have been on portions of this Ranch many times in the last 40 years and completed a variety of Consulting services during these previous times.

Bulletin 84 – Mojave River Ground Water Basins Investigation, approved August 1967 State of California – Department of Water Resources

United States Department of the Interior Geological Survey, 7.5-Minute Series (Topographic),

Geologic Map of San Bernardino County, showing Mines and Mineral Deposits, California Division of Mine and Geology, Published 1981

Information from Department of Toxic Substance Control

Preliminary Endangerment Assessment – Guidance Manual, January 1994 Interim Guidance for Sampling Agricultural Soils on June 28, 2000 Fact Sheet #2 on February 2001 Phase 1 Advisory on March 1, 2001

SFPD MEMO 01-01 on February 28, 2001 California Department of Education

San Bernardino Count Development Code

San Bernardino County Land Use Designation (Zoning) Map

San Bernardino County Fire Department • Hazardous Materials Division

620 South 'E' Streets

San Bernardino, CA 92415-0153

(909) 386-8401 FAX (909) 386-8460

REQUEST FOR RECORDS RESEARCH (4+/- week Timeframe at a minimum or not at all based upon previous experiences) NOT REQUESTED BECAUSE THIS SITE IS VACANT DESERT.

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PHASE 1 ASSESSMENT: HELENDALE CSD NEW WELL FIELD, HELENDALE, CA 92345 - APN 0467-121-22&28

CERTIFICATION:

I, RANDOLPH J. COLEMAN, the Consultant certifies and agrees that:

The purpose of this Assessment is for a potential purchase by Helendale CSD for the development of a "Well Field".

Randolph J. Coleman is providing professional consulting services as a California Licensed Civil Engineer (PE-Civil #36293) and has personally inspected the property by vehicle only, and has made an exterior visual inspection, if applicable, of all nearby or adjacent properties listed in the report and the analysis, opinions and conclusions developed.

• 3 SITES: 2 nearby Well Sites and the Local School (See pictures) were the only Sites.

Randolph J. Coleman certifies the assignment was not based on a requested conclusion; or the approval of a loan; a specific valuation, or contingent upon any other conclusion for the subject property.

Randolph J. Coleman certifies he is the "Sole-Owner" of ALTEC LAND PLANING.

Neither current nor future employment is applicable to complete this Phase 1 Environmental Assessment. No compensation for this assessment were for other professional services (i.e. active California Real Estate Broker (#00836955 since 1982 with a variety of professional designations: ALC, CCIM, CRB, CRS, GRI), American Planning Association professional AICP CEP Land Planner, California Licenses: Land Surveyor #5413, Qualified Stormwater Developer/Planner #21595, or as a Certified Wildlife Biologist #43090 by The Wildlife Society or Certified Arborist/Tree Risk Assessment Qualified by the International Arborist Society WE#8024A.

Randolph J. Coleman certifies this Assessment is not based in whole or in part upon the race, color, or national origin of the prospective occupants or owners of the properties or vicinity of the subject property.

To the best of Randolph J. Coleman's knowledge and belief, all statements and information in this Assessment are true and correct, and no information was knowingly withheld.

Randolph J. Coleman certifies the Assessment sets forth all contingent and limiting conditions, premises, assumptions, exclusions (imposed by the terms of the assignment or by the undersigned) and those conditions affecting analyses, opinions, and conclusions contained in the Assessment.

All analysis, conclusions and opinions concerning the real estate that are set forth in the Phase 1 Environmental Assessment were prepared by Randolph J. Coleman, the Consultant, whose signature appears on the Phase 1 Environmental Assessment.

No one provided significant professional assistance in the preparation of this report.

If a "Review Consultant" also has signed this Phase 1 Environmental Assessment Report, the reviewer's certification and narrative would clarify any modifications.

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PHASE 1 ASSESSMENT: HELENDALE CSD NEW WELL FIELD, HELENDALE, CA 92345 - APN 0467-121-22&28

CERTIFICATION - continued:

I, RANDOLPH J. COLEMAN, the Consultant certifies and agrees that:

I have provided a large variety of Consulting Services [Real Estate Brokerage Services - Acquisitions, Dispositions, Appraisals & Valuations, Site Selection, Leasing and Sales; Environmental Services – Phase 1's, Hazardous Materials; Biological Services – ESA Surveys, Baseline Assessments and associated Mitigation, Recommendations, Monitoring and Mapping; Master and Land Planning with Legal Entitlements, Plan Processing and Permitting; Soils, Structural and Civil Engineering and Land Surveying; Construction/Project Management] for personal investments, developers, churches, schools and governmental agencies (i.e. Cities, Special and School Districts) and other professional consultants and banks/lenders since 1980. This has included specifically both the existing and proposed owner of the subject property and in general terms included nearby properties in the general area. It has included all local Cities, Redevelopment Agencies, local school districts and most special districts in the Victor Valley and greater Mojave Desert area of Southern California (i.e. various projects in San Bernardino and Riverside Counties).

This Phase 1 Environmental Assessment is certified to:

HELENDALE COMMUNITY SERVICE DISTRICT C/O DR. KIMBERLY COX, GENERAL MANAGER

The undersigned has the appropriate knowledge and experience required to complete this assignment competently. Any lack of knowledge or experience is disclosed within this Phase 1 Environmental Assessment.

Respectfully submitted,

SEPTEMBER 11, 2020

ORIGINAL SIGNATURES, STAMP & PDF CREATED ON SEPTEMBER 11, 2020

DATE

Randolph J. Coleman,

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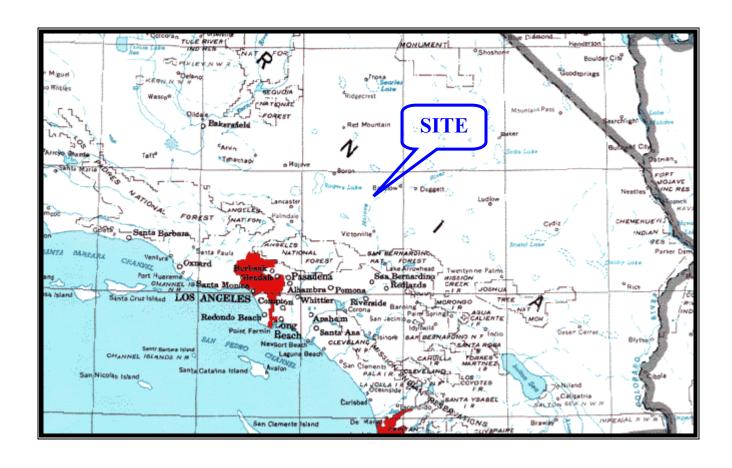
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PHASE 1 ASSESSMENT: HELENDALE CSD NEW WELL FIELD, HELENDALE, CA 92345 - APN 0467-121-22&28

ADDENDA

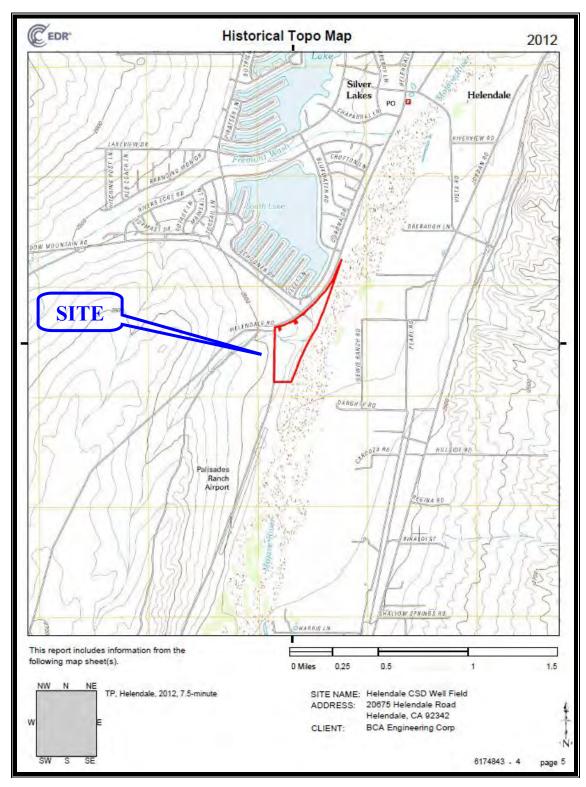
PHASE 1 ASSESSMENT: HELENDALE CSD NEW WELL FIELD, HELENDALE, CA 92345 - APN 0467-121-22&28

FIGURE 1 - REGIONAL LOCATION MAP OF SOUTHERN CALIFORNIA



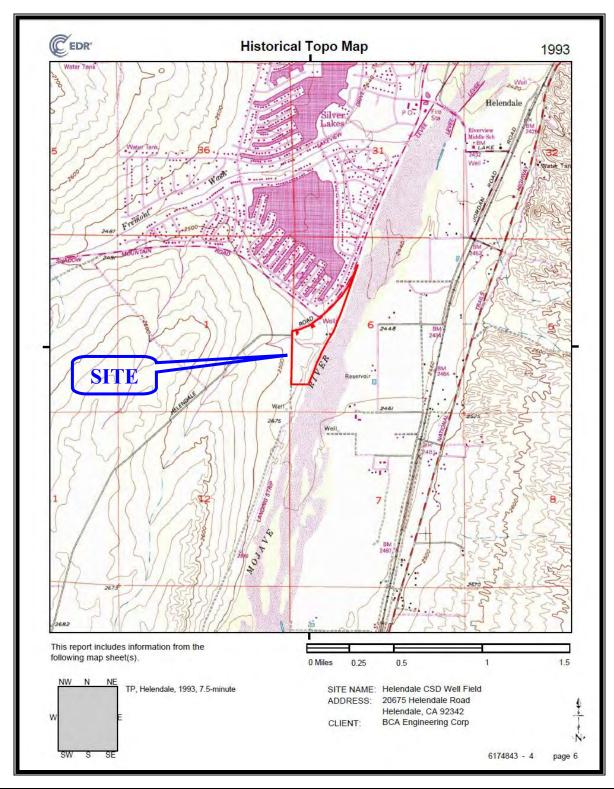
PHASE 1 ASSESSMENT: HELENDALE CSD NEW WELL FIELD, HELENDALE, CA 92345 - APN 0467-121-22&28

FIGURE 2-2012 USGS QUADRANGLE MAP



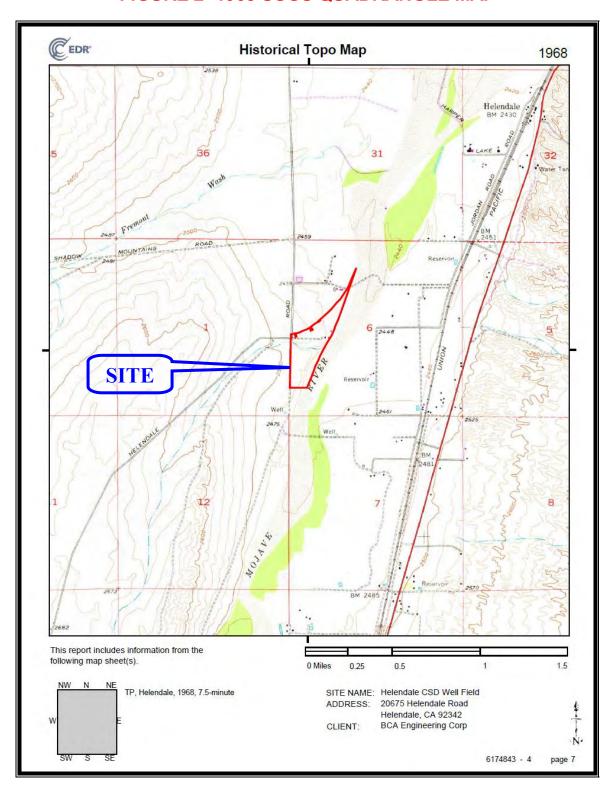
PHASE 1 ASSESSMENT: HELENDALE CSD NEW WELL FIELD, HELENDALE, CA 92345 - APN 0467-121-22&28

FIGURE 2- 1993 USGS QUADRANGLE MAP



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FIGURE 2-1968 USGS QUADRANGLE MAP

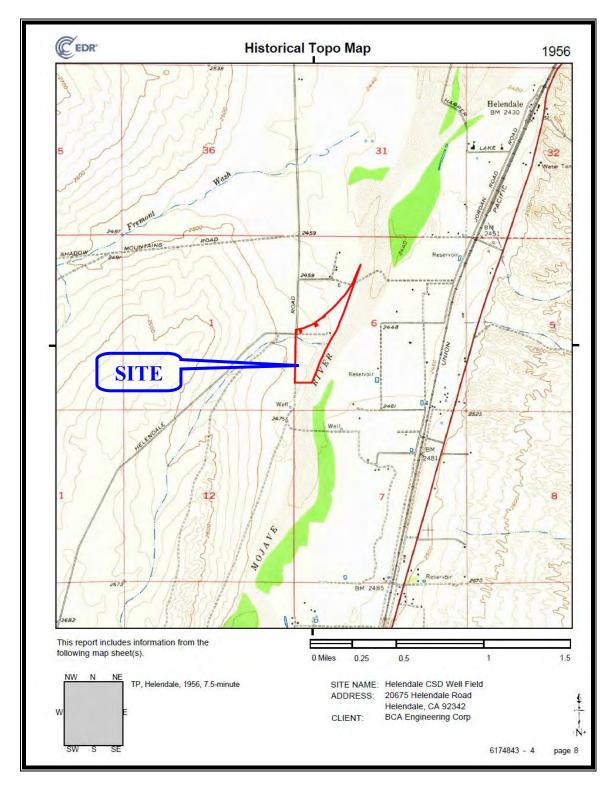


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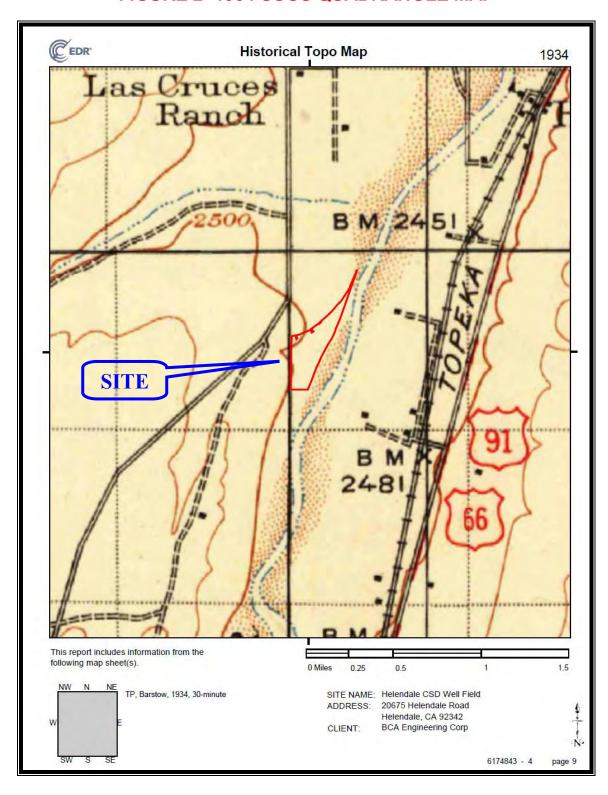
PHASE 1 ASSESSMENT: HELENDALE CSD NEW WELL FIELD, HELENDALE, CA 92345 - APN 0467-121-22&28

FIGURE 2-1956 USGS QUADRANGLE MAP



PHASE 1 ASSESSMENT: HELENDALE CSD NEW WELL FIELD, HELENDALE, CA 92345 - APN 0467-121-22&28

FIGURE 2- 1934 USGS QUADRANGLE MAP

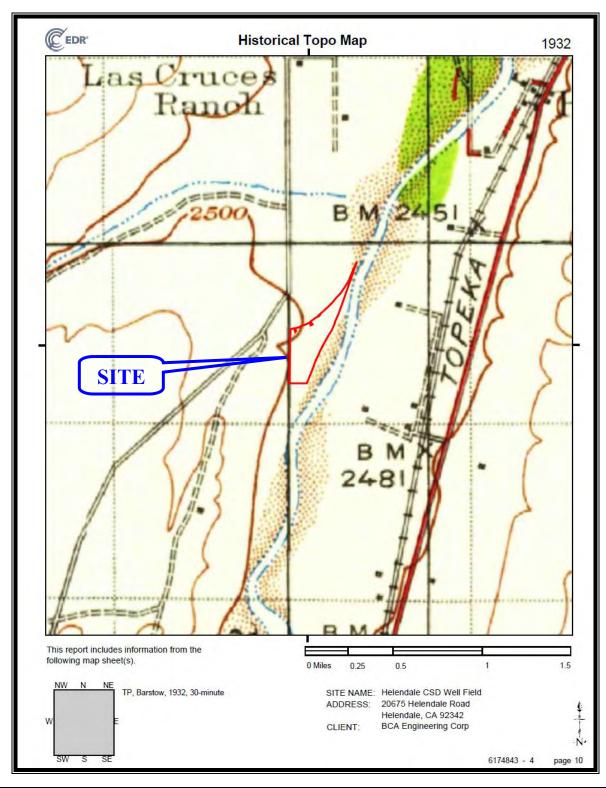


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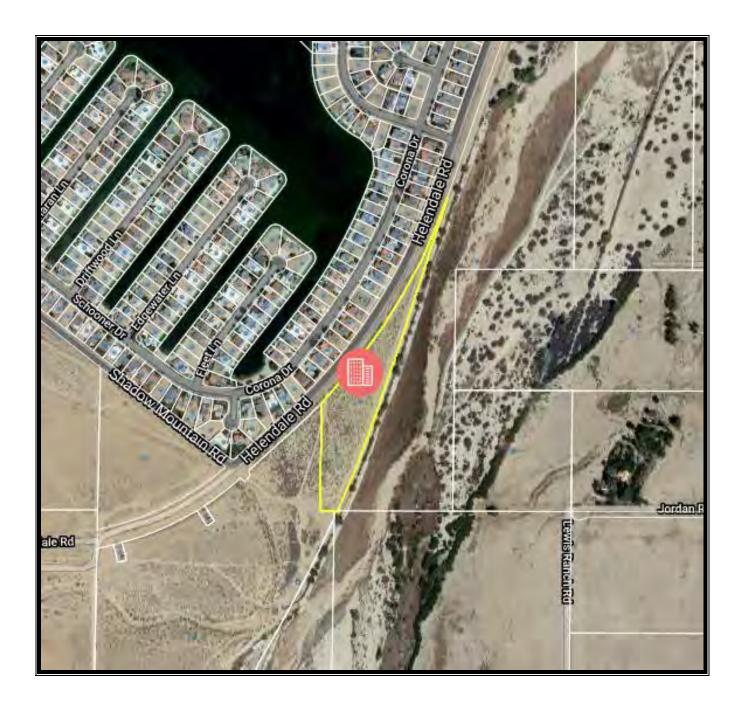
PHASE 1 ASSESSMENT: HELENDALE CSD NEW WELL FIELD, HELENDALE, CA 92345 - APN 0467-121-22&28

FIGURE 2- 1932 USGS QUADRANGLE MAP



PHASE 1 ASSESSMENT: HELENDALE CSD NEW WELL FIELD, HELENDALE, CA 92345 - APN 0467-121-22&28

FIGURE 3- FIRST AMERICAN TITLE AERIAL



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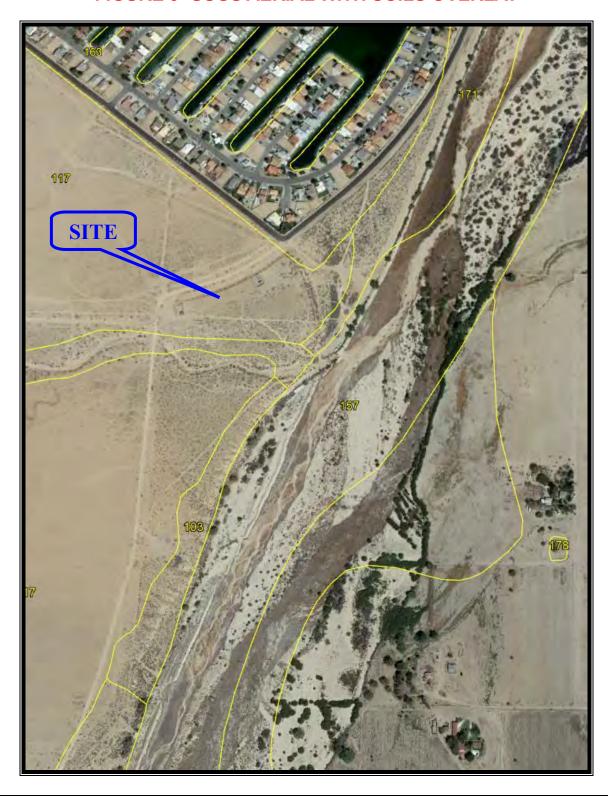
PHASE 1 ASSESSMENT: HELENDALE CSD NEW WELL FIELD, HELENDALE, CA 92345 - APN 0467-121-22&28

FIGURE 3- FIRST AMERICAN TITLE AERIAL



PHASE 1 ASSESSMENT: HELENDALE CSD NEW WELL FIELD, HELENDALE, CA 92345 - APN 0467-121-22&28

FIGURE 3- USGS AERIAL WITH SOILS OVERLAY



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PHASE 1 ASSESSMENT: HELENDALE CSD NEW WELL FIELD, HELENDALE, CA 92345 - APN 0467-121-22&28

FIGURE 3- USGS AERIAL WITH SOILS OVERLAY

117 - CAJON LOAMY SANDS, 0-2% SLOPES - MAJORITY OF SITE

Map Unit Composition Map units consist of 1 or more soil types, commonly referred to as "components". Area Geomorphic Position Component Type Component Name Fraction Soil Type 1 Cajon alluvial fans / Backslope 85% Major Soil Type Soil Type 2 Cajon 8% Inclusion Soil Type 3 Halloran 5% Inclusion Soil Type 4 Torrifluvents 2% Inclusion playas

Note: links to horizon data marked with an * are approximate.

Map Unit Data What is a Map Unit?

Cartographic information about this map unit.

Mian linii Namo.	PERCENT SLOPES

Map Unit Type: Consociation

Map Unit Symbol: 117

Map Unit Area: acres (28800ac. total in survey area)

Raw Map Unit Data

Raw Component Data (All Components)

Map Unit Aggregated Data

Generalized soils information within this map unit.

Control and Control and Control and Control and Control			
Farmland Class:	Prime farmland if irrigated		
Available Water Storage (0-100cm):	7 cm		
Max Flood Freq:	None		
Drainage Class (Dominant Condition):	Somewhat excessively drained		
Drainage Class (Wettest Component):	Somewhat excessively drained		
Hydric Conditions:	2		
[Annual] Min. Water Table Depth:	n/a		
[April-June] Min. Water Table Depth:	n/a		
Min Bedrock Depth:	n/a		
Raw Aggregated Map Unit Data			

Associated Point Data

inks to any NSSL point data within this map unit.

1. SND (\$1955CA071007)	[Lab Data] [Pedon Description]
2. Milham (\$1955CA071010)	[Lab Data] [Pedon Description]

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PHASE 1 ASSESSMENT: HELENDALE CSD NEW WELL FIELD, HELENDALE, CA 92345 - APN 0467-121-22&28

FIGURE 3- USGS AERIAL WITH SOILS OVERLAY

117 - CAJON LOAMY SAND, 2-9% SLOPES - WASH AREA

Map Unit Composition

Map units consist of 1 or more soil types, commonly referred to as "components".

Component Name	Geomorphic Position	Area Fraction	Component Type
Soil Type 1 Cajon	alluvial fans / Backslope	85%	Major Soil Type
Soil Type 2 Helendale		5%	<u>Inclusion</u>
Soil Type 3 Cajon		5%	<u>Inclusion</u>
Soil Type 4 Kimberlina		5%	<u>Inclusion</u>

Note: links to horizon data marked with an * are approximate.

Map Unit Data What is a Map Unit?

Cartographic information about this map unit.

Map Unit Name:	CAJON SAND, 2 TO 9 PERCENT SLOPES	
Map Unit Type:	<u>Consociation</u>	
Map Unit Symbol:	113	
Map Unit Area:	acres (117160ac. total in survey area)	
Raw Map Unit Data		
Raw Component Data (All Components)		

Map Unit Aggregated Data

Generalized soils information within this map unit.

Control and Control and Control and Control and Control		
Farmland Class:	Farmland of statewide importance	
Available Water Storage (0-100cm):	5 cm	
Max Flood Freq:	None	
Drainage Class (Dominant Condition):	Somewhat excessively drained	
Drainage Class (Wettest Component):	Somewhat excessively drained	
Hydric Conditions:	0	
[Annual] Min. Water Table Depth:	n/a	
[April-June] Min. Water Table Depth:	n/a	
Min Bedrock Depth:	n/a	
Raw Aggregated Map Unit Data		

Associated Point Data

Links to any NSSL point data within this map unit.

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PHASE 1 ASSESSMENT: HELENDALE CSD NEW WELL FIELD, HELENDALE, CA 92345 - APN 0467-121-22&28

FIGURE 3- USGS AERIAL WITH SOILS OVERLAY

103 - BADLAND, BLUFF AREA NEXT TO MOJAVE RIVER

Map units consist of 1 or more	e soil types, common	nly referred to as "components".		
Soil Type 1 Badland				
Soil Type 2 Rock outcrop				
Soil Type 3 Nebona				
Soil Type 4 Cajon				
Soil Type 5 Lithic Torriort	hents			
Soil Type 6 Cuddeback	nema			
Son Type o Cuddeback				
Note: links to horizon data	marked with an *	are approximate.		
Map Unit Data What is				
Cartographic information abou				
Map Unit Name: BADLAND				
Map Unit Type:	<u>Consociation</u>			
Map Unit Symbol:	103			
Map Unit Area: acres (3500ac. total in survey area)				
Raw Map Unit Data				
Raw Component Data (All Components)				
Map Unit Aggregat	ed Data			
Generalized soils information				
Farmland Class:		Not prime farmland		
Available Water Storage (0-100cm):		0 cm		
Max Flood Freq:				
Drainage Class (Dominar	nt Condition):			
Drainage Class (Wettest Component):				
Hydric Conditions:		0		
[Annual] Min. Water Table Depth:		n/a		
[April-June] Min. Water Table Depth:		n/a		
Min Bedrock Depth:		n/a		
•	Raw Aggrega	ted Map Unit Data		
Associated Point D)ata			
ASSOCIATED FOIRE	G1 6 G1			

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FIGURE 3- USGS AERIAL WITH SOILS OVERLAY

103 - VILLA LOAMY SANDS, NORTH END OF SITE

Map Unit Composition

Map units consist of 1 or more soil types, commonly referred to as "components".

Component Name

Soil Type 1 Villa

Soil Type 2 Unnamed soils Soil Type 3 Unnamed

Note: links to horizon data marked with an * are approximate.

Map Unit Data What is a Map Unit?

Cartographic information about this map unit.

Map Unit Name: VILLA LOAMY SAND

Map Unit Type: Consociation

Map Unit Symbol: 171

Map Unit Area: acres (13700ac. total in survey area)

Raw Map Unit Data

Raw Component Data (All Components)

Map Unit Aggregated Data

Generalized soils information within this map unit.

Farmland Class: Prime farmland if irrigated

Available Water Storage (0-100cm): 8.18 cm

Max Flood Freq: Rare

Drainage Class (Dominant Condition): Moderately well drained

Drainage Class (Wettest Component): Moderately well drained

Hydric Conditions: 5

[Annual] Min. Water Table Depth: 137 cm [April-June] Min. Water Table Depth: 137 cm

Min Bedrock Depth: n/a

Raw Aggregated Map Unit Data

Associated Point Data

Links to any NSSL point data within this map unit.

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FIGURE 3- USGS AERIAL WITH SOILS OVERLAY

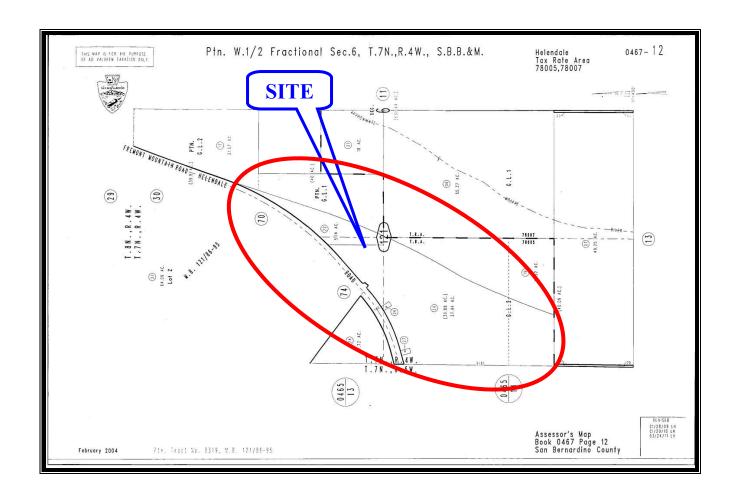
163 - NEXT TO SILVER LAKES-URBAN LAND COMPLEX, 0-9% SLOPES

Map Unit Composition Map units consist of 1 or more soil types, commonly referred to as "components". Component Name Soil Type 1 Torriorthents Soil Type 2 Torripsamments Soil Type 3 Urban land Note: links to horizon data marked with an * are approximate.			
Map units consist of 1 or more soil types, commonly referred to as "components". Component Name Soil Type 1 Torriorthents Soil Type 2 Torripsamments Soil Type 3 Urban land Note: links to horizon data marked with an * are approximate.			
Soil Type 1 Torriorthents Soil Type 2 Torripsamments Soil Type 3 Urban land Note: links to horizon data marked with an * are approximate.			
Soil Type 1 Torriorthents Soil Type 2 Torripsamments Soil Type 3 Urban land Note: links to horizon data marked with an * are approximate.			
Soil Type 2 Torripsamments Soil Type 3 Urban land Note: links to horizon data marked with an * are approximate.			
Note: links to horizon data marked with an * are approximate.			
Anna IIIn 14 Din to			
4 U-24 B-4-			
Map Unit Data <u>What is a Map Unit?</u>			
Cartographic information about this map unit.			
Map Unit Name: TORRIORTHENTS-TORRIPSAMMENTS-URBAN LAND COMPLEX, 0 TO 9 PERCENT SLOPES			
Map Unit Type: <u>Complex</u>			
Map Unit Symbol: 163			
Map Unit Area: acres (1900ac. total in survey area)			
Raw Map Unit Data			
Raw Component Data (All Components)			
Man Unit Assuranted Data			
Map Unit Aggregated Data			
Generalized soils information within this map unit. Farmland Class: Not prime farmland			
Available Water Storage (0-100cm):			
Max Flood Freq:			
Drainage Class (Dominant Condition): Well drained			
Drainage Class (Wettest Component): Well drained			
Hydric Conditions:			
[Annual] Min. Water Table Depth: n/a			
[April-June] Min. Water Table Depth: n/a			
The same traces table popular			
Min Bedrock Depth: n/a			

Links to any NSSL point data within this map unit.

PHASE 1 ASSESSMENT: HELENDALE CSD NEW WELL FIELD, HELENDALE, CA 92345 - APN 0467-121-22&28

FIGURE 4- ASSESSOR'S PARCEL MAP



PHASE 1 ASSESSMENT: HELENDALE CSD NEW WELL FIELD, HELENDALE, CA 92345 - APN 0467-121-22&28

FIGURE 4- ASSESSOR'S PARCEL MAP INFORMATION

Property Information	n			
Owner(s):	Ross Carl E Living Trust 5		Mailing Address:	7850 Dean Martin Dr #502, Las Vegas, NV 89139
Owner Phone:	Unknown		Property Address:	Helendale Rd, Helendale, CA 92342
Vesting Type:	N/A		Alt. APN:	0467-121-22-0000
County:	San Bernardino		APN:	0467-121-22-0000
Map Coord:	291-A5		Census Tract:	011600
Lot#:			Block:	
Subdivision:			Tract:	8319
Legal:	N 1/2 Nw 1/4 And W 1/2 Se 1/4 Nw 1 As Cov 8/18/71 In Bk 7734 Pg 591 O		Sec 6 Tp 7N R 4W Ex Ptn In Tracts	8319 And 8320 And Ex Ptn To Sbdo Cnty Flood Control Dist
Property Characteri	stics			
Use:	Vacant Land (Nec)	Year Built / Eff. :	1	Sq. Ft. :
Zoning:		Lot Size Ac / Sq Ft:	5.14 / 223898	# of Units:
Sale and Loan Infor	mation			
Sale / Rec Date:	04/22/2004 / 06/30/2004	*\$/Sq. Ft.:		2nd Mtg.:
Sale Price:	\$5,500,000	1st Loan:		Prior Sale Amt:
Doc No.:	<u>464589</u>	Loan Type:		Prior Sale Date:
Doc Type:	Deed	Transfer Date:	06/30/2004	Prior Doc No.:
Seller:	Older Trust	Lender:		Prior Doc Type:
*\$/Sq. Ft. is a calculation of Sale Price divided by Sq. Feet.				
Tax Information				
Imp Value:			Exemption Type:	
Land Value:	\$23,402		Tax Year / Area:	2019 / 078-005
Total Value:	\$23,402		Tax Value:	
Total Tax Amt:	\$457.77		Improved:	

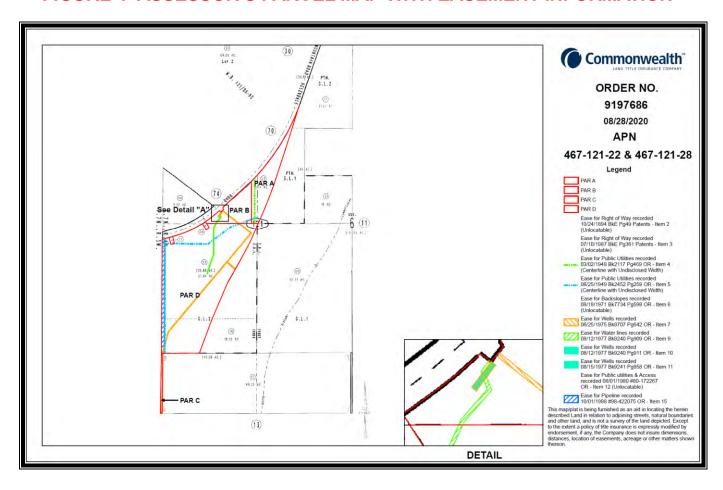
Property Information	on				
Owner(s):	Ross Carl E Living Trust 5		Mailing Address:	7850 Dean Martin Dr #502, Las Vegas, NV 8	89139
Owner Phone:	Unknown		Property Address:	20675 Helendale Rd, Helendale, CA 92342	
Vesting Type:	N/A		Alt. APN:		
County:	San Bernardino		APN:	0467-121-28-0000	
Map Coord:			Census Tract:	011600	
Lot#:			Block:		
Subdivision:			Tract:		
	Ptn N 1815 Ft Gov Lot 2 Sw 1/4 Sec	6 And W 1/2 Gove Lot 1 Nw 1/4	Sec 6 And W 20 Ft S 825 Ft Sw 1/4 S	ec 6 Tp 7N R 4W Lying Sely Of A Strip Of Land	100 Ft Wide
	C/L Of Which Is Desc As Beg At Pt C	/L Helendale Rd 100 Ft Wide As	Shown Tract 8319 Sd Pt Being N 47	Deg 41 Min 42 Seconds E 50 Ft From Swly Tern	ninus Of
Legal:		-		42 Seconds W 50 Ft To Beg Of Tangent Curve C	-
	-		-	t To Sd Curve S 75 Deg 04 Min 00 Seconds W	135 Ft M/L To
	Intersection With C/L Helendale Rd E	x E 75 Ft W 1/2 Gov Lot 1 And E	Ex Ptn To Sbdo Cnty Flood Control As	Conv 8/18/71 In Bk 7734 Pg	
Property Character	istics				
Use:	Well/Water	Year Built / Eff. :	1	Sq. Ft. :	
Zoning:		Lot Size Ac / Sq Ft:	37.94 / 1652666	# of Units:	
Stories:		Improvements:		Parking / #: /	
Gross Area:		Garage Area :		Basement Area:	
Sale and Loan Info	rmation				
Sale / Rec Date:		*\$/\$q. Ft.:		2nd Mtg.:	
Sale Price:		1st Loan:		Prior Sale Amt:	
Doc No.:		Loan Type:		Prior Sale Date:	
Doc Type:		Transfer Date:		Prior Doc No.:	
Seller:		Lender:		Prior Doc Type:	
*\$/Sq. Ft. is a calculation of Sale Price divided by Sq. Feet.					
Tax Information					
Imp Value:	\$65,004		Exemption Type:		
Land Value:	\$143,006		Tax Year / Area:	2019 / 078-005	
Total Value:	\$208,010		Tax Value:		
Total Tax Amt:	\$2,821.83		Improved:	31%	

Ginger Coleman, MPA, Director of Community Relations & Environmental Planning

Randy Coleman: AICP, CCIM, MIRM, Certified Wildlife Biologist #43090, Certified Arborist #WE-8024A, R.E. Broker #00836955 California Licenses: Civil Engineer #36293, Land Surveyor #5413, QSD/P #21595, CDFW: Scientific Collecting Permit #

PHASE 1 ASSESSMENT: HELENDALE CSD NEW WELL FIELD, HELENDALE, CA 92345 - APN 0467-121-22&28

FIGURE 4- ASSESSOR'S PARCEL MAP WITH EASEMENT INFORMATION



P.O. Box 1175 Apple Valley, CA 92307 (760) 242-9917 RandyAICP@gmail.com GingerEColeman@gmail.com

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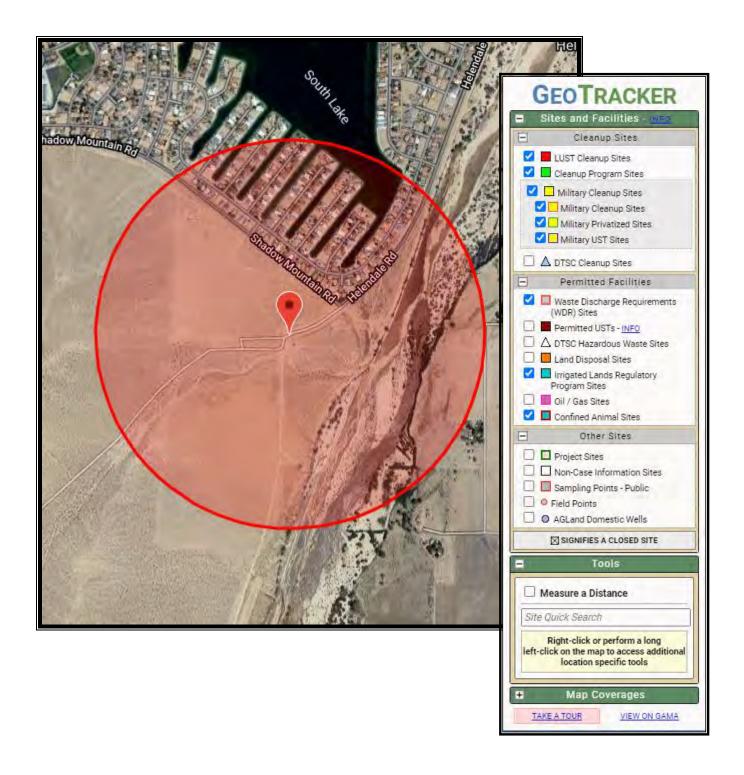
PHASE 1 ASSESSMENT: HELENDALE CSD NEW WELL FIELD, HELENDALE, CA 92345 - APN 0467-121-22&28

FIGURE 4- GRANT DEED FOR PARENT PARCELS Total of 41 Parcels on Grant Deed - with 49 Individual Parcels

Engris No. aznacosa - vas Qader No. aznacosa - vas	Doc#. 2004 – 0464589 Titles: 1 Pages: 11 Fam. 55. 86 Taves 6.959. 36 0.1her 6.39 PAID 56.116. 56
GPA	NT DEED are on board durantion
FOR A VALUABLE CONSIDERATION, research of the Country of the Count	s or encembrances remaining at time of sale, and ceipt of which is hereby acknowledged, TRUST AGRESMENT OF 1988
hereby GRANT(S) to CARL E. ROSS, TRUSTEE OF THE CARL E. E the following described real property in the	ROSS LIVING TRUST DATED 5/21/91
County of SAN BERNARDING LEGAL DESCRIPTION ATTACHED HE	, State of California: ERETO AND MADE A PART HEREOF BY REFERENCE
a Notary Public In and for said County and State, personally appe	EARHARA T. OLDER, TRUSTER OF THE OLDER TRUST AGREEMENT OF 1966 OF THE OLDER TRUST AGREEMENT OF 1966 LINEYA J. CARDINAL S.
BARBARA T. OLDER personally known to me (or proved to me on the basis of at evidence) to be the person(s) whose name(s) is/are subscrib within instrument and ecknowledged to me that he/she/trey exe same in his/her/their subscribed capacityles), and that by his signature(s) on the instrument his person(s), or the entity upon which the person(s) acted, executed the instrument. WILNESS my hand and official seal.	americancy and to the current
Sude Scardine	12-15 2004 SEE My Commission Expires FOR HOTHAN SERE ON BIAMP OF UNE: IF NO PARTY SO SHOWN, MAIL AS DIRECTED ABOVE

PHASE 1 ASSESSMENT: HELENDALE CSD NEW WELL FIELD, HELENDALE, CA 92345 - APN 0467-121-22&28

FIGURE 4- GEOTRACKER INFORMATION



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FIGURE 5 - SITE PHOTOGRAPHS



Street Scene: Looking Northerly along Helendale Road (Site on Right)



Street Scene: Looking Westerly along Shadow Mountain Road from Helendale Road (Site behind)



Street Scene: Looking Southerly along the unpaved portion of Helendale Road (Site on Left)



Street Scene: Looking at Site Easterly from Helendale and Shadow Mountain Intersection (Site on Right and Left)



Well Site #26081 along Helendale Road and west property line



Well Site #26063 along Helendale Road and west property line



Rivers Edge Middle School



Well Site within Silver Lakes, just west of Site



Well Site within Silver Lakes, just west of Site



Easement through north parcel Site



Near North Corner of Site looking Northerly along Helendale Road



Near North Corner of Site looking Southerly at Site along Helendale Road



Near North Corner of Site looking Easterly at Mojave River



Midpoint of Site west line looking Northerly along Helendale Road (Site on Right)

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Midpoint of Site west line looking Easterly from Helendale Road (Site on Both sides)



Midpoint of Site west line looking Southerly along Helendale Road (Site on Left)

Apple Valley, CA 92307

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Midpoint of Site west line looking Easterly at Drainage Course from Helendale Road



Looking at Mojave Water Agency Water Line Easement along Helendale Road



Looking at Natural Gas Line along Helendale Road



Near Southwest Corner: Looking Easterly at Well Site and Mojave River area (Site on left)



Near Southwest Corner: Looking Northerly along Helendale Road (Site on right)



Midpoint of Site east line looking Southerly at Bluff area of Mojave River (Typical)



Looking at well sites and power poles near Mojave River



Looking southerly across south parcel near well sites and power poles



Looking at remnants of alfalfa ranching near well sites and power poles near Mojave River



Looking at remnants of alfalfa ranching near well sites and power poles near Mojave River

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PHASE 1 ASSESSMENT: HELENDALE CSD NEW WELL FIELD, HELENDALE, CA 92345 - APN 0467-121-22&28

CORRESPONDENCE

(NONE)

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QUALIFICATIONS

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PHASE 1 ASSESSMENT: HELENDALE CSD NEW WELL FIELD, HELENDALE, CA 92345 - APN 0467-121-22&28

CURRICULUM VITAE – RESUME OVERVIEW of RANDOLPH J. COLEMAN

B. S. Degree: University of California - IRVINE - CIVIL & Environmental ENGINEERING, 1980

Environmental Impact Report Analysis Adv. Transportation Modeling Environmental Economics Planning Theory Public Health Aspects of Pollution Adv. Wastewater Treatment Noise and Vibration Control Air Pollution

STATE LICENSES AND PROFESSIONAL DESIGNATIONS ATTAINED (STATE, YEAR, #, EXPIRES, ETC.):

Licensed Real Estate Broker: CA-1982 (#00836955 – Expires 10/28/23)

Registered Civil Engineer: CA-1983 (#36293 – Exp. 06/30/22), AZ (#16969 – Exp. 6/30/23), NV (#7441-12/31/2020)

Licensed Land Surveyor: CA-1984 (#5413 – Exp. 09/30/22) and NV (#7441- 12/21/2020) Contractor's License: CA-1988 [Engineering "A" & Building "B" CA (No current license or RMO) Registered Environmental Assessor: CA-1994 (DTSC & Cal/EPA #05791 – Program ended in 2013)

Water Treatment Operator T2 #32553 (2010) & Water Operator D2#38614 (2011): CA. DPH (Passed D3/T3 tests)

Qualified SWPPP Developer/Practitioner: (CASQA-2011 - #21595 - Exp. 10/30/2021)

Certified Arborist #WE-8024A – Life Member-International Society of Arboriculture (2007 - Exp.-12/2021)
Certified Wildlife Biologist - Life Member of Western Chapter/The Wildlife Society (2010 - Exp.-12/2021)
AICP-CEP- American Institute of Certified Planners-Certified Environmental Planner (1994 - #9892– Exp. 12/2021)

CDP - Certified Downtown Professional (2008 - California Downtown Association)
SR/WA - Senior Member, International Right of Way Association (#4462-Retired)

Builder - MIRM - Member, Institute of Residential Marketing (non-member of NAHB-09/30/1992 #none)

CAAHS [SHMS] - Certified Active Adult Housing Specialist (2009) [Senior Housing Marketing/Management Specialist]

CAPS/CGP - Certified Aging-in-Place Specialist (2008) / Certified Green Professional (2008)

CSP - Certified Hew Home Sales Professional (1992)

R.E. Broker - CCIM - Certified Commercial-Investment Member (1989 - #3167)

ALC - Accredited Land Consultant (1994 - #772 – Retired – Realtors Land Institute)

CRB - Certified Real Estate Brokerage Manager (1987 - #8514)

CRS/CSP - Certified Residential Specialist (1992 - #19091)/

GAA/GRI - General Accredited Appraiser (#492)/Graduate of the Realtors Institute (1987 - #8483)

CERTIFICATES, RECENT CONFERENCES, MEMBERSHIP, ENVIRONMENTAL & BIOLOGICAL TRAINING:

Geographical Information Systems Certificate – UC Riverside - (24+ units)

Desert Ecology, Field Ecology, Botany, Geology & Ornithology Certificates – UC Riverside (21/21/12/12 units)

Global Positioning Systems Certificate - UC Riverside - (21.5 units)

LAFCO Conference 2011 (Napa)

Advances in Desert Weeds Management 2010-11: Center for Conservation Biology, UC Riverside Palm Desert Campus Southern California Association of Governments Conference 2010-11: @ La Quinta, CA

Largest Metropolitan Planning Organization (MPO) in the U.S. for 18 million people within 38,000 square miles and serving six (6) of ten (10) counties in Southern California - Los Angeles, Orange, Riverside, San Bernardino, Imperial, and Ventura Counties.

Habitat Conservation Plans: Moving across Boundaries: UC Riverside & San Diego Zoo-(Nov.16-17, 2009)

Governor's Conference-Siting & Permitting Large-Scale Projects in the California Desert: @ UC Riverside-Mar. 24, 2010

Congressional Cities Conference: @ Washington D.C. - 2009 -11 [meet w/Senators, Congressmen, staffs, various Dept.'s]

San Bernardino County-City Conference: @ Arrowhead - 2009 -11

San Bernardino Water Conference: @ Ontario Convention Center – 2008 - 2009

Wildlife Management & Ecosystem Management – 3 unit courses taught by Dr. Cameron Barrow, UC Riverside Research Center

Water Treatment Plant Operation I @ CSU Sacramento – 6 units - April 216, 2010

Sp. Dist. & Local Gov. Institute (2010 Workshops): HR Principles for Managing Employees, Supplying Water & Board Secretaries

40-Hr & 8-Hr Transportation [Cert. #11671]: HAZWOPER – Haz. Waste Operations-29CFR1910.120 (e) (3)-DOT HM-126(f) **38-Hr. Army Corps of Engineers Wetland Delineation Method Training & Management** (Jan. 2007 in San Diego)

Colps of Engineers wettand Defineation Method Training & Management (San. 2007) in San Diego

Life Member: Sierra Club & Desert Tortoise Council & 2-Day Workshop (Nov. 2002) for handling and monitoring Tortoises

Member: The Wildlife Society - Attended California Burrowing Owl Symposium in Sacramento (Nov. 2003) Attended Mojave Ground Squirrel 2-Day Workshop (Apr. 2005)

Rare Pond Species Survey Techniques Workshop – Western Pond Turtle, CA Tiger Salamander & Red-legged Frog (Mar 2009)

Member: California Native Plant Society - 4-Day Vegetation Mapping Workshop - CDFG & CNPS (11/2006)

3-Day Botanical Protocol Workshop – UC Davis, CDFG & CNPS (05/07) & 2-Day Riparian Ecology & Plant ID. (11/07)

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PHASE 1 ASSESSMENT: HELENDALE CSD NEW WELL FIELD, HELENDALE, CA 92345 - APN 0467-121-22&28

Consultant has completed the following education, workshops, licenses, and professional designations:

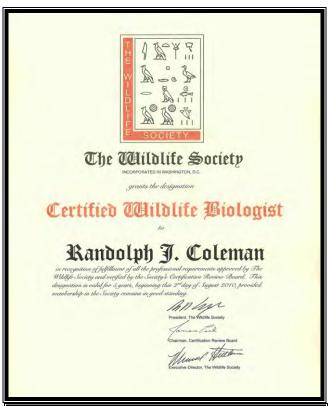
- Tree Care for Birds & Other Wildlife (Arizona/California/Nevada & Hawaii) International Society of Arboriculture
- 2020 Wildland-Urban Interface American Planning Association
- 2019 Joshua Tree Master Naturalist: Joshua Tree National Park Desert Institute & UC Riverside (8 courses)
 - Desert Plant Phenology of Joshua Tree National Park: UC Riverside and JTNP Desert Institute
 - Desert Tortoise Biology & Conservation: CDFW/BLM/UC Riverside and JTNP Desert Institute
 - Fugitive Dust Control (CV1903-007751-7796): South Coast Air Quality Management District
- 2018 Tree Risk Assessment Qualified (International Society of Arboriculture Certified Arborist WE#-8024A)
 - Large Branchiopods of California Workshop: TWS-SoCal and USFWS @ San Diego Botanic Garden
 - Sea Turtle Workshop: NMFS Protected Res. Div., West Coast Region/NOAA @ Long Beach Aquarium
- 2010/15 San Bernardino County Planning & Airport Commissioner Review & Approval of CEQA Studies & Projects
- 2014 Arroyo Toad (Anaxyrus californicus) Workshop (The Wildlife Society San Diego Chapter)
 - Sustainable Communities @ APA-PTS Conference: Feb. 7-8, 2014 in San Diego
 - California Annual Conference/APA (4 Days Anaheim and Visalia in 2013 & 2014)
- 2013 Yellow Billed Cuckoo (Coccyzus americanus) Workshop (Kern River Valley KRV Audubon Facility)
 - Southwestern Willow Flycatcher (Empidonax traillii extimus) Workshop (KRV Audubon Facility)
 - National Innovative Communities Conference: 2013 (Ontario CA San Diego mention as a leader may times)
 - Tree Risk Assessment Qualified International Society of Arboriculture (WE#-8024A Renewed in 2018)
 - National Innovative Communities Conference: 2013 (Ontario CA San Diego mention as a leader may times)
- 2012 American Planning Association Annual Conference (4 Days Los Angeles)
 - Environmental Leadership Certificate: CSU San Marcos (Matt Rahm, PhD., Esq.)
- 1998/12 **UC Riverside Field & Other Certificates: -** Desert Ecology Field Ecology Botany Ornithology Geology Geographic Information Systems Geographical Positioning Systems Educational Facility Planning
 - American Planning Association Annual Conference (4 Days Los Angeles)
 - California County Planning Commissioners Association (2 Days Suisun City)
- 2011 Scientific Collecting Permit #11586 by California Department of Fish and Wildlife
 - Legends of the Fall: Exploring the Clandestine Flora of Early Fall in the Eastern Mojave Desert Rare Autumn Annuals – Dr. James Andre & Dr. Tasha La Doux - Calif. Native Plant Society @ UC- DRC
 - Certified Environmental Planner Advanced Specialty Certification for AICP (2011 [1 of 33 in U.S.])
 - Qualified Storm Water Developer & Planner (QSD/P #21595) by CASQA
- 2010 Certified Wildlife Biologist #43090 by The Wildlife Society Life Member (2006)-Western Sec.
- 2009 Western Pond Turtle, California Tiger Salamander & Red-legged Frog Workshop (CSU Sonoma)
 - Wildlife Management & Ecosystem Management (Dr. Barrow, UC Riverside Research Center/3-unit courses)
 - Bird Biology Cornell University/3-unit course
- 2008 Palms Culture in the Southwest (2 days International Society of Arboriculture (ISA) in Las Vegas)
- Certified Arborist/ [Tree Risk Assessment Qualified] WE#-8024A Int. Society of Arboriculture (+60hours CE)
 - Riparian Ecology & Plant Identification Workshop (CNPS Ventura River)
 - Jurisdictional Delineation of Wetlands (38-hours of Army Corps of Engineering training in San Diego)
 - Protocols for Botanical Reports (2 day U.C. Davis Bodega Bay Marine Research Lab)
- Vegetation Mapping in Redlands (4 day Dr. Todd Keeler-Wolf, Senior Vegetation Ecologist, CDFW & Dir.
 California Native Plant Society's (CNPS) Vegetation Program. Author of Manual of California Vegetation and Terrestrial Vegetation of California, among other books and resources)
- 2005 Mojave Ground Squirrel Workshop Wildlife Society, CDFG & USFW
- 2003 California Burrowing Owl Symposium The Wildlife Society/Western Section in Sacramento
- 2002 Tortoise Workshop by Desert Tortoise Council (Life Member), CDFG & USF&W
- 1994 Registered Environmental Assessor #05791; Calif. Environmental Protection Agency (DTSC/ended in 2012)
- 1993 American Institute Certified Planners #9892 & Certified Environmental Professional (2011 [1 of 33 in U.S.])
- 1982/4 CA Licenses: Land Surveyor #5413 (1984); Civil Engineer #36293 (1983); Real Estate Broker #836955 (1982)
- 1980 B.S. in Civil & Environmental Engineering from University of California,
- 1976 Personally familiar with the general area; have completed various Surveys, Engineering, Planning & Appraisals

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ASBESTOS¹

Asbestos is a naturally occurring, fibrous, silicate mineral that is found naturally in the earth's crust. The molecules arrange themselves into very-long, thin fibers, which are flexible and extraordinarily strong. These fibers are fireproof, flexible, and chemical-resistant. The most common form of asbestos, chrysotile appears white in light-refraction, but the individual fibers are actually-colorless. Asbestos occurs in abundance in the serpentine deposits found in the areas of continental subduction zones. The most common form of asbestos has been mined extensively in California, Arizona, and Vermont. In 1975, 100,000 short tons of asbestos were mined in the US.

Asbestos has been used for literally thousands of uses in the United States since the industrial revolution:

Fireproofing	Paper products Textiles	Thermal and acoustic insulation
Electrical insulation	Gaskets, packaging	Plastic products (vinyl floor tiles)
Asbestos-concrete	Roofing felts, papers	Automotive brake pads & other uses

The uses of asbestos have been systematically banned since the early 1970's. A list of these bans is as follows:

1971	Pipe-lagging (Casi and Aircell)	1973	Most sprayed-on friable ACM
1975	Joint compounds and spackles	1977	Fireplace logs: patch compounds
1978	All sprayed-on friable ACM		-

Historically, millions of tons of asbestos-containing materials have been used in building construction in the United States. The US-EPA has published a survey regarding the use of asbestos-containing building materials (ACBM's) in buildings and concludes that there are an estimated 733,000 buildings in the USA that contain ACBM's.

The general rule of thumb is that if a building was built prior to 1978, it most likely contains some form of ACBM. If it was built after 1978, the probability is less but there should still be a physical inspection and material testing to determine whether ACBM's are present.

In-order-to be harmful, asbestos must become airborne and be taken in the respiratory system. Consequently, the friability of the asbestos is the most important quality to evaluate. Numerous certified laboratories perform fiber counts on materials submitted to them and friability tests on materials found to be asbestos.

NOTE: Tremolite is a naturally occurring mineral and is naturally above the designated PPM threshold values. It is one of the minerals in some of the nearby hills in the Town of Apple Valley and is being currently mined for the commercial value of other minerals (i.e. Talc) on the east side of Interstate 15.

¹ "California Groundwater & Soil Contamination", by Thomas J. Bois, Esq. and Bernard J. Luther, CEG; 1994

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ASBESTOS - continued²

The most critical factor in analyzing asbestos is friability. A friable material is one that will crumble under human contact at some time, become airborne, and be introduced into the lung tissue of persons breathing in the area. Because many of these materials have been used for construction purposes inside buildings, there is a high probability of human contact with them.

Products that are generally considered friable include:

Sprayed-on Acoustic insulation Structural fireproofing

Products that are sometimes friable include:

Pipe insulation
Roofing felt
Woven asbestos
Duct wrap

Products that are rarely friable include:

Transite ducts
Vinyl asbestos tile
Asphalt asbestos shingles
Transite boards

California has many institutions that train and certify asbestos inspectors. Some consulting firms have several certified asbestos inspectors and will perform asbestos services as a matter of course during a Phase I Environmental Assessment, if requested in advance, for an additional fee and additional laboratory testing costs.

Generally, millions of older, asbestos-containing buildings are still in existence throughout the United States. These older buildings are of the type and price range that tend to remain active on the real estate market and are frequently excused. If you are a consultant for buyers in this market, be sure to place your client on alert regarding their exposure to environmental liability.

[&]quot;California Groundwater & Soil Contamination", by Thomas J. Bois, Esq. and Bernard J. Luther, CEG; 1994

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LEAD³

Lead is a heavy metal that was discovered to be systemically harmful several decades ago. Society is gradually processing lead out of common use, but its dangers and effects are still prevalent.

Historically, lead has been used in paint as a durability enhancer and coloring agent, in gasoline as an antiknock agent, in pewter (an alloy containing lead), in ceramics as part of the glossing process, and in lead pipes and solder, which have been used for water delivery since Roman times.

The primary problem with lead is that it is slightly water-soluble and because of this can end up in the human system through the consumption of water. The use of lead in automobile fuel has placed billions of tons of lead into the air as particulate matter. This particular metal can be assimilated into the human system through the lungs and cause lead poisoning.

Lead poisoning can cause damage to the heavy tissue of the body, primarily the liver, kidneys, and brain. Mental retardation in children has been attributed to their consumption of lead paint as infants.

The laboratory test to specify for lead is the EPA 200/6000/7000. These are all series of tests for metals and the particular metal you are looking for should be specified on the chain of custody sheet. Often, a call to the laboratory will allow you to specify a particular method that has been approved by the State

RADON

The State of California is not considered a high radon area based on national database of over 60,000 indoor radon concentrations recorded in the "Nationwide Distribution of Indoor Radon Measurements: A Preliminary Data base" by H. Ward Alter and Richard A. Oswald. The publication indicates that only 4.5 percent of the 688 indoor radon measurements compiled for California were greater than the action guideline of 4 Pico curies per liter (Pci/L); indication that California is potentially a low-radon area.

[&]quot;California Groundwater & Soil Contamination", by Thomas J. Bois, Esq. and Bernard J. Luther, CEG; 1994

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PHASE 1 ASSESSMENT: HELENDALE CSD NEW WELL FIELD, HELENDALE, CA 92345 - APN 0467-121-22&28

Clarifiers, Interceptors, Industrial Waste Systems & Docks

CLARIFIERS, SAND AND GREASE INTERCEPTORS

Normally, the installation of clarifiers, sand and grease interceptors are required by local codes and ordinances. These codes and ordinances are designed to prevent the entrance of heavy industrial solids, sand, grit, and oils into the sewage collection system.

Clarifiers are typically installed at machine shops and fabricators, while sand and grease interceptors are normally installed at car washes, gas stations and Mechanic/Repair operations.

The capacity of both interceptors and clarifiers are typically based upon a specified retention time. However, very satisfactory results can be obtained using velocity and surface overflow rates. Using this basis of design, the maximum allowable velocity is 3 feet per second (FPS) or designed gallons per day for the surface overflow rate.

GREASE INTERCEPTORS

Restaurants, institutions, fast-food establishments, and camps all produce grease in quantities, which require grease interceptors. Due to the composition of grease, large volume interceptors are required to provide cooling for coagulation and separation.

Grease causes frequent line plugging when entering the community sewage collection systems. Grease-clogged soils cause On-site disposal systems failure because of the failure in seepage pits or leach lines. This is caused by the clogging of the soils by coagulated grease, thereby preventing the percolation of wastewater into the soil.

SAND TRAPS

The sand trap is a two-compartment interceptor designed to trap grit, sand and oil from wastewater or steam cleaning. It is installed in service stations where the volume of wastewater does not warrant the installation of a sand and grease interceptor.

Gas stations typically install a sand trap in a central location, inside the service bays of such establishments. Other wash-down facilities can be located indoors or outdoors. The inlet compartment is supplied with a grated cover. The bay's floor area is then sloped for direct drainage of wash-down water into this compartment. Fitting placement then allows for maximum grit collection. Simply removing grated covers does removal of accumulated grit, which exposes the entire interior of the trap, for cleaning.

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Clarifiers, Interceptors, Industrial Waste Systems & Docks - continued

INDUSTRIAL WASTE SYSTEMS

Many Industrial and Commercial operations produce, as a by-product or result of their operations, wastewater which cannot be disposed of directly into the sewage collection system. Wastewater containing grease, sand, solids, flammable wastes and acidic or very alkaline materials must be intercepted or treated before being discharged. Small amounts from many sources can produce increased maintenance costs and collection system deterioration, either by direct contact or the production of destruction gases which cause deterioration of materials (i.e. gases can cause concrete manholes and/or grout to deteriorate at a rapid rate).

Local codes and ordinances have been adopted to protect communities from increased operational costs caused by a number of dischargers. Interceptor requirements vary greatly from area to area. Due to this situation, the following information has been provided for general use in designing Industrial Systems.

LOCAL & REGIONAL WASTEWATER FACILITIES

The local or regional wastewater facilities may have a designated "Pretreatment Coordinator" for these more advanced industrial waste systems.

DOCK SUMP PUMPS

At-grade docks typically have a drainage containment device with a small sump pump to drain the lowered dock area.

LAUNDRY ROCK FILTERS

These filters are designed for rural or recreational area laundries with on-site disposal. Historically, direct disposal systems have failed rapidly from lint-clogged soils. The rock filters are designed to provide quiescence and filtration. The inlet section is equal to the total daily flow. This section then provides the necessary quiescence and filtration by allowing the grit and heavy materials to settle while the lint floats to the surface forming a mat.

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PHASE 1 ASSESSMENT: HELENDALE CSD NEW WELL FIELD, HELENDALE, CA 92345 - APN 0467-121-22&28

Clarifiers, Interceptors, Industrial Waste Systems & Docks - continued

SIZING OF INTERCEPTOR, CLARIFIER'S, AND INDUSTRIAL SYSTEM'S

Engineering design and sizing are affected by numerous factors (industrial and commercial uses, intervals and patterns of use, temperature extremes and variations, weather patterns) and designed accordingly to these numerous factors on an individual basis. There are a few basic guidelines to follow after sizing is completed:

Attributes of the Design of Industrial System

The interceptor shall be installed as close to the grease/sand source as possible.

Proper setbacks shall be maintained from structures, property lines, building setbacks, etc. to comply with local codes.

Location of the interceptor should be dependent upon easy pump truck access to allow proper maintenance.

Influent should enter below normal water level to allow for quiescence.

The inlet, outlet, and baffling system should be of "T" design with vertical extension twelve (12") inches from the interceptor floor and well above the normal water level.

To allow for proper maintenance, manholes/access to finished grade shall be provided. (Local codes and ordinances shall be followed.)

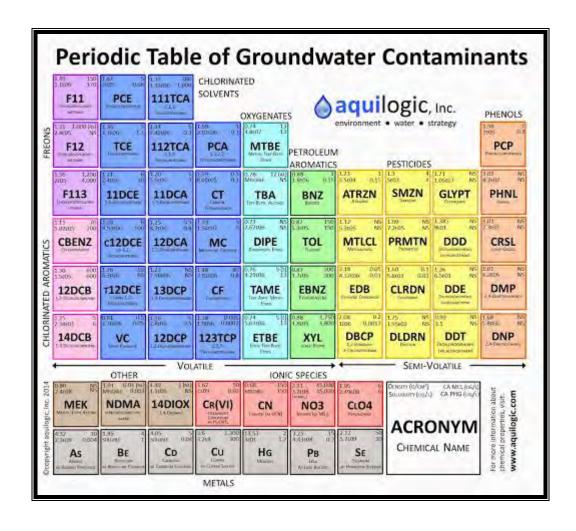
The manhole cover(s) shall be of gas-tight construction, if applicable. They shall be designed to withstand the expected live loads and dead loads.

For on-site disposal systems, separate disposal areas shall be used from grease interceptors and septic tank effluent.

A check of local ordinance, codes and local design parameters shall be made and followed.

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PHASE 1 ASSESSMENT: HELENDALE CSD NEW WELL FIELD, HELENDALE, CA 92345 - APN 0467-121-22&28



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PHASE 1 ASSESSMENT: HELENDALE CSD NEW WELL FIELD, HELENDALE, CA 92345 - APN 0467-121-22&28

ADDENDA #1:

Sanborn Map REPORT (2 Pages)

Historical USGS Topo Maps (10 Pages)

EDR INC. - ENVIRONMENTAL REPORT (134 Pages)

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PHASE 1 ASSESSMENT: HELENDALE CSD NEW WELL FIELD, HELENDALE, CA 92345 - APN 0467-121-22&28

Helendale CSD Well Field 20675 Helendale Road Helendale, CA 92342

Inquiry Number: 6174843.3

August 31, 2020

Certified Sanborn® Map Report



Certified Sanborn® Map Report

08/31/20

Site Name:

Client Name:

Helendale CSD Well Field 20675 Helendale Road Helendale, CA 92342 EDR Inquiry # 6174843.3 BCA Engineering Corp 15181 Pocahontas Street Apple Valley, CA 92307 Contact: Randy Coleman



The Sanborn Library has been searched by EDR and maps covering the target property location as provided by BCA Engineering Corp 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 # D55F-4538-87A4

PO# N/A

Project HCSD New Well Field

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.



Sanborn® Library search results

Certification #: D55F-4538-87A4

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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page 2

Helendale CSD Well Field 20675 Helendale Road Helendale, CA 92342

Inquiry Number: 6174843.4

August 31, 2020

EDR Historical Topo Map Report

with QuadMatch™



EDR Historical Topo Map Report

08/31/20

Site Name: Client Name:

Helendale CSD Well Field 20675 Helendale Road Helendale, CA 92342 EDR Inquiry # 6174843.4 BCA Engineering Corp 15181 Pocahontas Street Apple Valley, CA 92307 Contact: Randy Coleman



EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by BCA Engineering Corp were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Resi	ults:	Coordinates:	
P.O.#	N/A	Latitude:	34.723909 34° 43' 26" North
Project:	HCSD New Well Field	Longitude:	-117.345905 -117° 20' 45" West
		UTM Zone:	Zone 11 North
		UTM X Meters:	468329.87
		UTM Y Meters:	3842480.77
		Elevation:	2482.21' above sea level

Maps Provided:

2012

1993

1968

1956

1934

1932

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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2012 Source Sheets



Helendale 2012 7.5-minute, 24000

1993 Source Sheets



Helendale 1993 7.5-minute, 24000 Aerial Photo Revised 1989

1968 Source Sheets



Helendale 1968 7.5-minute, 24000 Aerial Photo Revised 1968

1956 Source Sheets



Helendale 1956 7.5-minute, 24000 Aerial Photo Revised 1952

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1934 Source Sheets

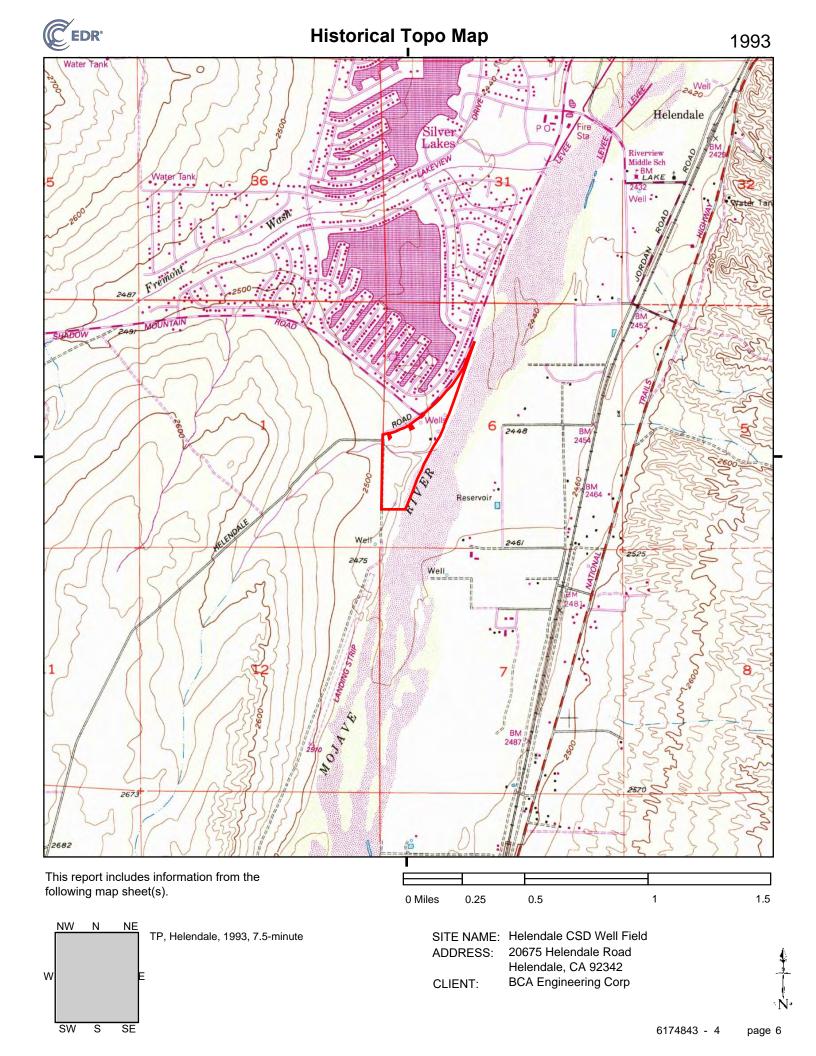


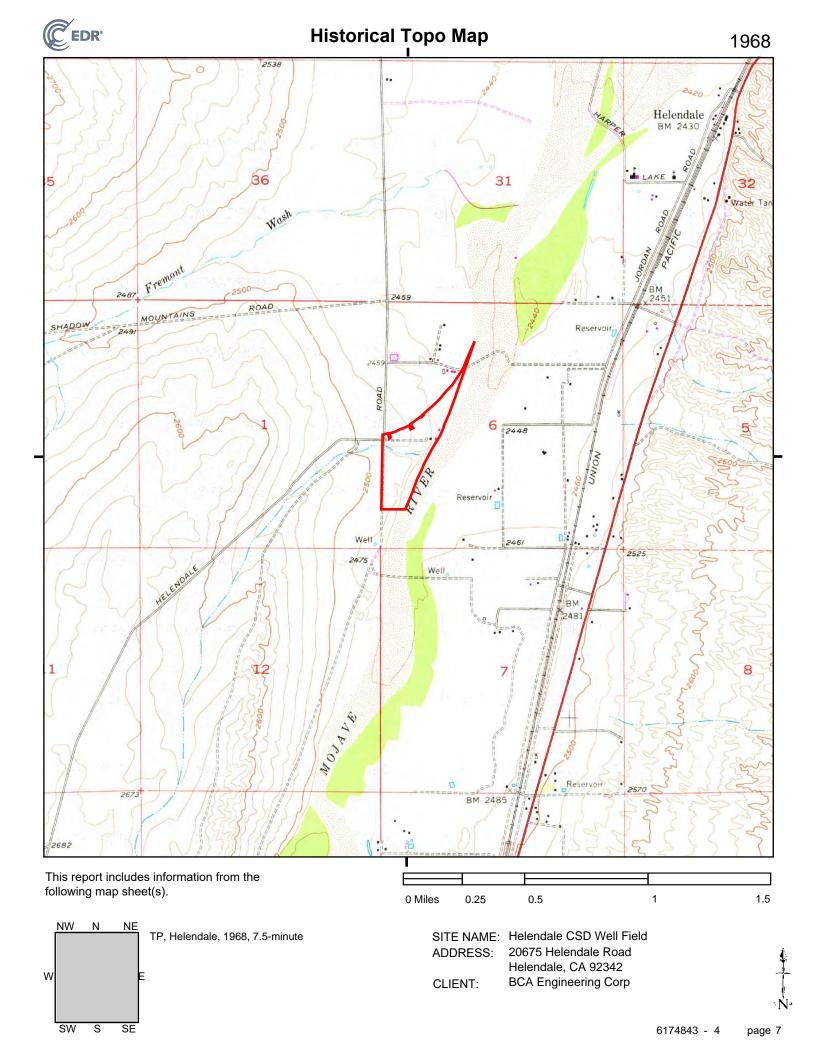
Barstow 1934 30-minute, 125000

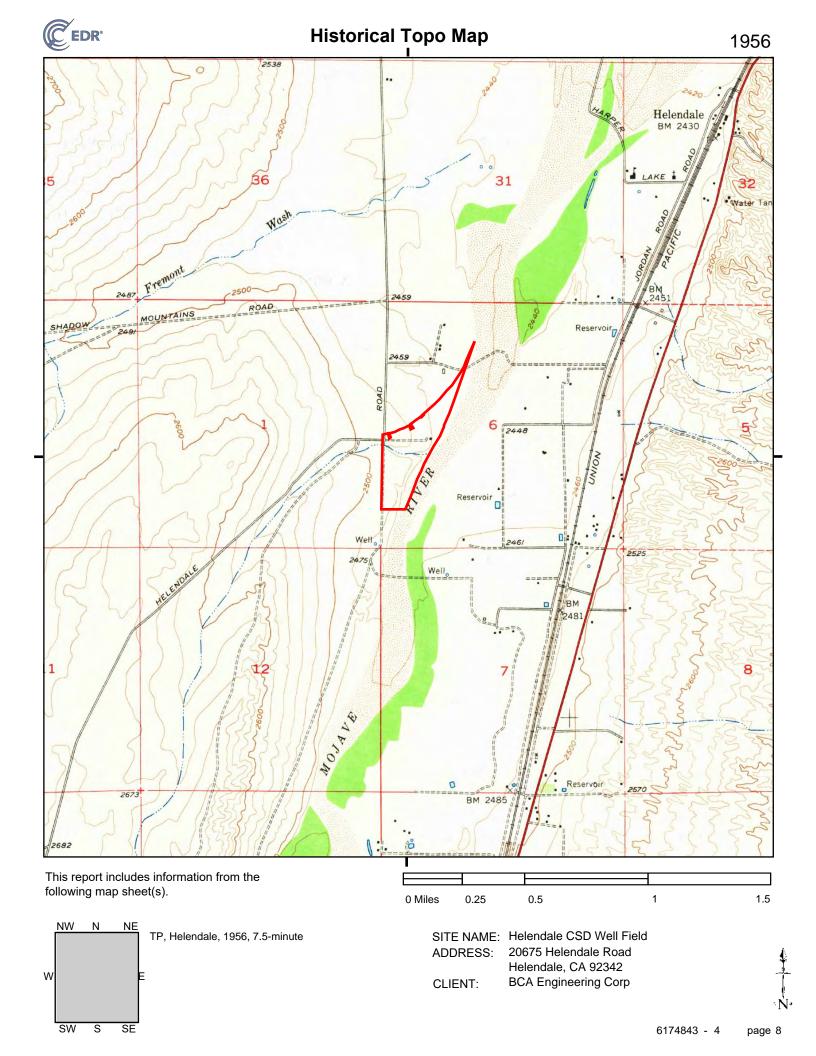
1932 Source Sheets



Barstow 1932 30-minute, 125000







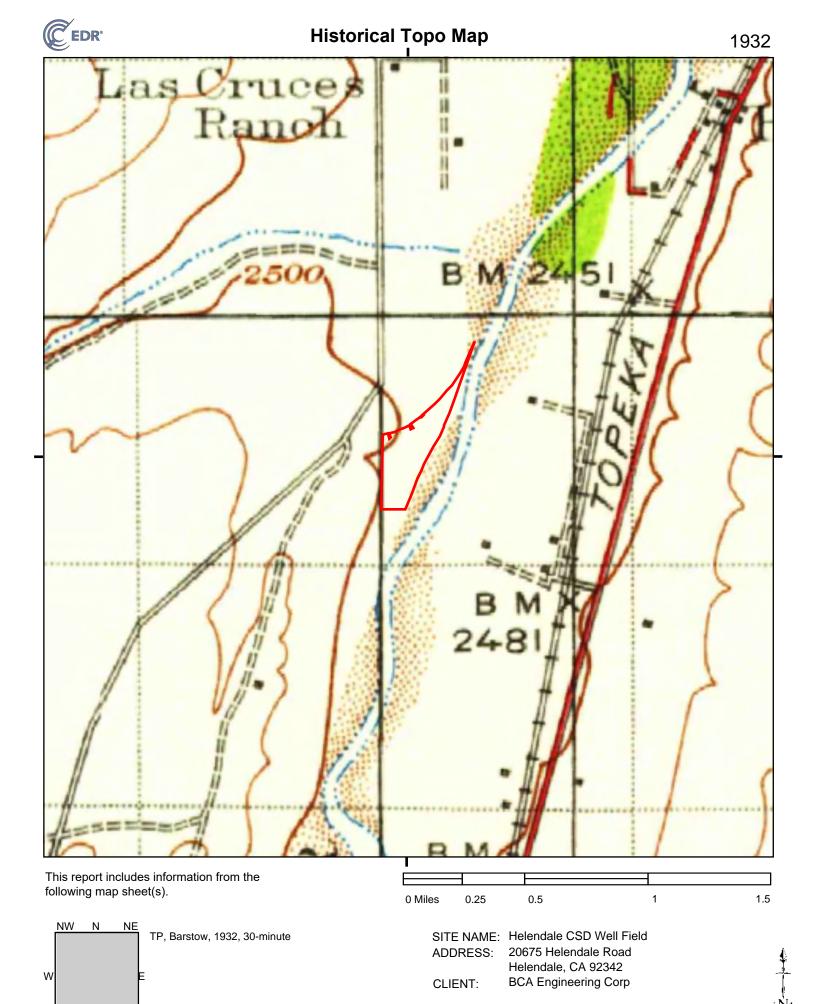
NW N NE
TP, Barstow, 1934, 30-minute
W

following map sheet(s).

0 Miles 0.25 0.5 1 1.5

SITE NAME: Helendale CSD Well Field ADDRESS: 20675 Helendale Road Helendale, CA 92342

CLIENT: BCA Engineering Corp



Helendale CSD Well Field

20675 Helendale Road Helendale, CA 92342

Inquiry Number: 6174843.2s

August 31, 2020

The EDR Radius Map™ Report with GeoCheck®



6 Armstrong Road, 4th floor Shelton, CT 06484 Toll Free: 800.352.0050 www.edrnet.com

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Thank you for your business.Please contact EDR at 1-800-352-0050 with any questions or comments.

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A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

20675 HELENDALE ROAD HELENDALE, CA 92342

COORDINATES

Latitude (North): 34.7239090 - 34° 43′ 26.07″ Longitude (West): 117.3459050 - 117° 20′ 45.25″

Universal Tranverse Mercator: Zone 11 UTM X (Meters): 468329.2 UTM Y (Meters): 3842284.0

Elevation: 2481 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5619060 HELENDALE, CA

Version Date: 2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20140601 Source: USDA

MAPPED SITES SUMMARY

Target Property Address: 20675 HELENDALE ROAD HELENDALE, CA 92342

Click on Map ID to see full detail.

MAP				RELATIVE	DIST (ft. & mi.)
ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	ELEVATION	DIRECTION
1	HELENDALE CSD - WELL	26081 HELENDALE RD	San Bern. Co. Permit, CERS	Lower	18, 0.003, North
2	HELENDALE CSD - WELL	26161 BALBOA CT	San Bern. Co. Permit, CERS	Lower	151, 0.029, NNE
A3	HELENDALE CSD - WELL	26275 CORONA DR	San Bern. Co. Permit	Lower	200, 0.038, NNE
A4	HELENDALE CSD - WELL	26257 CORONA DR	San Bern. Co. Permit, CERS	Lower	219, 0.041, NNE
5	RIVERS EDGE MIDDLE S	RIVERS EDGE ROAD/VOY	ENVIROSTOR, SCH	Higher	4490, 0.850, NW

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL	site list

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

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-SQG______RCRA - Small Quantity Generators

RCRA-VSQG...... RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity

Generators)

Federal institutional controls / engineering controls registries

LUCIS.....Land Use Control Information System

US ENG CONTROLS...... Engineering Controls Sites List US INST CONTROLS...... Institutional Controls Sites List

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

LUST______ Geotracker's Leaking Underground Fuel Tank Report INDIAN LUST_____ Leaking Underground Storage Tanks on Indian Land

CPS-SLIC Statewide SLIC Cases

State and tribal registered storage tank lists

FEMA UST..... Underground Storage Tank Listing

UST..... Active UST Facilities

AST......Aboveground Petroleum Storage Tank Facilities

INDIAN UST...... Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

VCP....... Voluntary Cleanup Program Properties INDIAN VCP...... Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS..... Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT...... Waste Management Unit Database

SWRCY...... Recycler Database

HAULERS...... Registered Waste Tire Haulers Listing

INDIAN ODI...... Report on the Status of Open Dumps on Indian Lands

ODI..... Open Dump Inventory

DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations

IHS OPEN DUMPS..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL..... Delisted National Clandestine Laboratory Register

HIST Cal-Sites Database SCH..... School Property Evaluation Program

CDL..... Clandestine Drug Labs CERS HAZ WASTE..... CERS HAZ WASTE

Toxic Pits...... Toxic Pits Cleanup Act Sites

US CDL...... National Clandestine Laboratory Register PFAS Contamination Site Location Listing

Local Lists of Registered Storage Tanks

SWEEPS UST..... SWEEPS UST Listing

HIST UST..... Hazardous Substance Storage Container Database CERS TANKS...... California Environmental Reporting System (CERS) Tanks

CA FID UST..... Facility Inventory Database

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

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

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

Act)/TSCA (Toxic Substances Control Act)

..... Material Licensing Tracking System COAL ASH DOE..... Steam-Electric Plant Operation Data

COAL ASH EPA..... Coal Combustion Residues Surface Impoundments List

PCB TRANSFORMER...... PCB Transformer Registration Database

RADINFO...... Radiation Information Database

HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing

DOT OPS..... Incident and Accident Data

CONSENT..... Superfund (CERCLA) Consent Decrees

INDIAN RESERV.....Indian Reservations

FUSRAP..... Formerly Utilized Sites Remedial Action Program

UMTRA..... Uranium Mill Tailings Sites

LEAD SMELTERS..... Lead Smelter Sites

US AIRS...... Aerometric Information Retrieval System Facility Subsystem

US MINES..... Mines Master Index File ABANDONED MINES..... Abandoned Mines

FINDS......Facility Index System/Facility Registry System ECHO..... Enforcement & Compliance History Information DOCKET HWC..... Hazardous Waste Compliance Docket Listing

UXO...... Unexploded Ordnance Sites

FUELS PROGRAM..... EPA Fuels Program Registered Listing CA BOND EXP. PLAN...... Bond Expenditure Plan

CUPA Listings..... Hazardous Material Business Plan CUPA Listings..... Hazardous Material Business Plan

DRYCLEANERS..... Cleaner Facilities

EMI..... Emissions Inventory Data ENF..... Enforcement Action Listing

Financial Assurance Information Listing

HAZNET..... Facility and Manifest Data

ICE.....ICE

HIST CORTESE..... Hazardous Waste & Substance Site List HWP..... EnviroStor Permitted Facilities Listing

MINES..... Mines Site Location Listing

MWMP..... Medical Waste Management Program Listing

NPDES Permits Listing

PEST LIC...... Pesticide Regulation Licenses Listing

PROC..... Certified Processors Database Notify 65..... Proposition 65 Records

UIC Listing

WDS...... Waste Discharge System

WIP..... Well Investigation Program Case List MILITARY PRIV SITES...... MILITARY PRIV SITES (GEOTRACKER)

PROJECT.....PROJECT (GEOTRACKER)

WDR...... Waste Discharge Requirements Listing CIWQS...... California Integrated Water Quality System

CERS..... CERS

NON-CASE INFO...... NON-CASE INFO (GEOTRACKER) OTHER OIL GAS..... OTHER OIL & GAS (GEOTRACKER) PROD WATER PONDS...... PROD WATER PONDS (GEOTRACKER) SAMPLING POINT..... SAMPLING POINT (GEOTRACKER) WELL STIM PROJ...... Well Stimulation Project (GEOTRACKER)

MINES MRDS..... Mineral Resources Data System HWTS..... Hazardous Waste Tracking System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP..... EDR Proprietary Manufactured Gas Plants

EDR Hist Auto______ EDR Exclusive Historical Auto Stations EDR Hist Cleaner.____ EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF	Recovered Government Archive Solid Waste Facilities List
RGA LUST	Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in **bold italics** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

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 04/27/2020 has revealed that there is 1 ENVIROSTOR site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
RIVERS EDGE MIDDLE S Facility Id: 60000839	RIVERS EDGE ROAD/VOY	NW 1/2 - 1 (0.850 mi.)	5	17
Status: No Action Required				

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

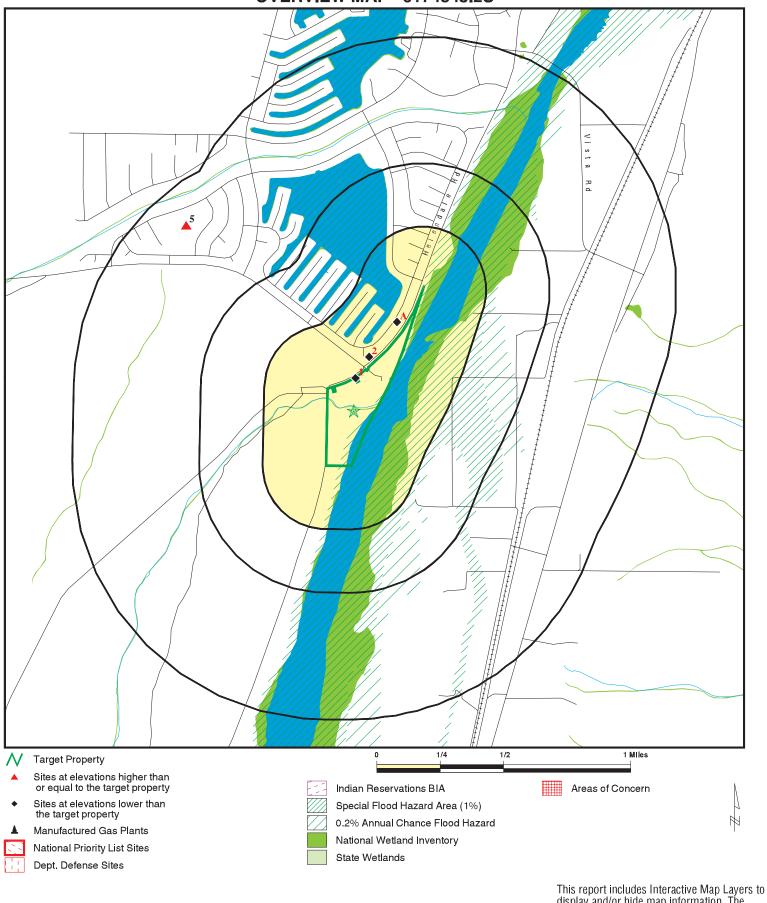
San Bern. Co. Permit: San Bernardino County Fire Department Hazardous Materials Division.

A review of the San Bern. Co. Permit list, as provided by EDR, and dated 02/25/2020 has revealed that there are 4 San Bern. Co. Permit sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
HELENDALE CSD - WELL Facility Status: ACTIVE Facility Id: FA0010036	26081 HELENDALE RD	N 0 - 1/8 (0.003 mi.)	1	9
HELENDALE CSD - WELL Facility Status: INACTIVE Facility Id: FA0010034	26161 BALBOA CT	NNE 0 - 1/8 (0.029 mi.)	2	11
HELENDALE CSD - WELL Facility Status: INACTIVE Facility Id: FA0010033	26275 CORONA DR	NNE 0 - 1/8 (0.038 mi.)	A3	14
HELENDALE CSD - WELL Facility Status: INACTIVE Facility Id: FA0010026	26257 CORONA DR	NNE 0 - 1/8 (0.041 mi.)	A4	15

Due to poor or inadequate address information, the following sites were not mapp	ea. Count: 1 records.
Site Name	Database(s)
	CDL

OVERVIEW MAP - 6174843.2S

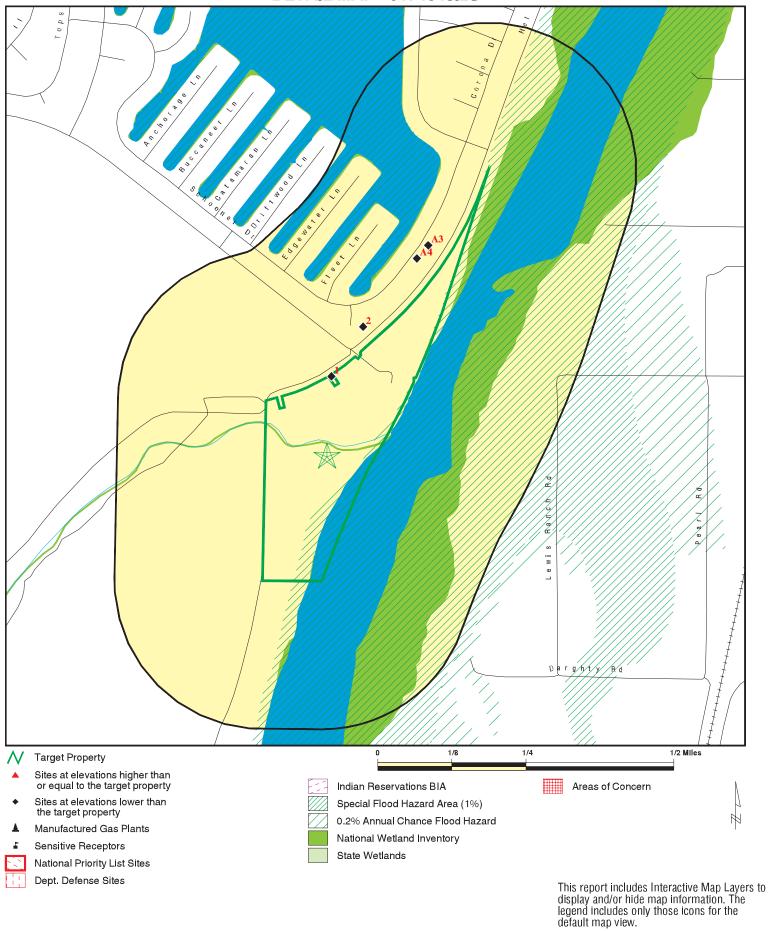


display and/or hide map information. The legend includes only those icons for the default map view.

CLIENT: BCA Engineering Corp CONTACT: Randy Coleman SITE NAME: Helendale CSD Well Field ADDRESS: 20675 Helendale Road INQUIRY#: 6174843.2s Helendale CA 92342 LAT/LONG: 34.723909 / 117.345905

DATE: August 31, 2020 3:03 pm

DETAIL MAP - 6174843.2S



SITE NAME: Helendale CSD Well Field

ADDRESS: 20675 Helendale Road
Helendale CA 92342
LAT/LONG: 34.723909 / 117.345905

CLIENT: BCA Engineering Corp
CONTACT: Randy Coleman
INQUIRY #: 6174843.2s
DATE: August 31, 2020 3:05 pm

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENT	TAL RECORDS							
Federal NPL site list								
NPL Proposed NPL NPL LIENS	1.000 1.000 1.000		0 0 0	0 0 0	0 0 0	0 0 0	NR NR NR	0 0 0
Federal Delisted NPL sit	e list							
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY SEMS	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0
Federal CERCLIS NFRA	P 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-COR	RACTS TSD fa	acilities list						
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generator	s list							
RCRA-LQG RCRA-SQG RCRA-VSQG	0.250 0.250 0.250		0 0 0	0 0 0	NR NR NR	NR NR NR	NR NR NR	0 0 0
Federal institutional con engineering controls reg								
LUCIS US ENG CONTROLS US INST CONTROLS	0.500 0.500 0.500		0 0 0	0 0 0	0 0 0	NR NR NR	NR NR NR	0 0 0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equiva	lent NPL							
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equiva	lent CERCLIS	3						
ENVIROSTOR	1.000		0	0	0	1	NR	1
State and tribal landfill a solid waste disposal site								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking s	storage tank li	ists						
LUST	0.500		0	0	0	NR	NR	0

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST CPS-SLIC	0.500 0.500		0	0	0	NR NR	NR NR	0
State and tribal registere	d storage tar	ık lists						
FEMA UST UST AST INDIAN UST	0.250 0.250 0.250 0.250		0 0 0 0	0 0 0 0	NR NR NR NR	NR NR NR NR	NR NR NR NR	0 0 0 0
State and tribal voluntary	cleanup site	es						
VCP INDIAN VCP	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0
State and tribal Brownfie	lds sites							
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENT	TAL RECORDS	<u>s</u>						
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / S Waste Disposal Sites	olid							
WMUDS/SWAT SWRCY HAULERS INDIAN ODI ODI DEBRIS REGION 9 IHS OPEN DUMPS	0.500 0.500 0.001 0.500 0.500 0.500 0.500		0 0 0 0 0 0	0 0 NR 0 0 0	0 0 NR 0 0 0	NR NR NR NR NR NR	NR NR NR NR NR NR	0 0 0 0 0 0
Local Lists of Hazardous Contaminated Sites	waste /							
US HIST CDL HIST Cal-Sites SCH CDL CERS HAZ WASTE Toxic Pits US CDL PFAS	0.001 1.000 0.250 0.001 0.250 1.000 0.001 0.500		0 0 0 0 0 0	NR 0 0 NR 0 0 NR	NR 0 NR NR NR 0 NR	NR 0 NR NR 0 NR	NR NR NR NR NR NR NR	0 0 0 0 0 0
Local Lists of Registered	Storage Tar	ıks						
SWEEPS UST HIST UST CERS TANKS CA FID UST	0.250 0.250 0.250 0.250		0 0 0	0 0 0 0	NR NR NR NR	NR NR NR NR	NR NR NR NR	0 0 0 0
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2 DEED	0.001 0.500		0 0	NR 0	NR 0	NR NR	NR NR	0 0
Records of Emergency I	Release Repo	rts						
HMIRS CHMIRS LDS MCS SPILLS 90	0.001 0.001 0.001 0.001 0.001		0 0 0 0	NR NR NR NR NR	NR NR NR NR NR	NR NR NR NR NR	NR NR NR NR NR	0 0 0 0
Other Ascertainable Rec	ords							
RCRA NonGen / NLR FUDS DOD SCRD DRYCLEANERS US FIN ASSUR EPA WATCH LIST 2020 COR ACTION TSCA TRIS SSTS ROD RMP RAATS PRP PADS ICIS FTTS MLTS COAL ASH DOE COAL ASH DOE COAL ASH EPA PCB TRANSFORMER RADINFO HIST FTTS DOT OPS CONSENT INDIAN RESERV FUSRAP UMTRA LEAD SMELTERS US MINES	0.250 1.000 1.000 0.500 0.001			0 0 0 0 RR 0 RRR 0 RR RR RR RR O RRR O RRR O O O O	NOOORRARRORRARRORRAROOOOORRARRARARAAAAAAA	NR	NR N	
ABANDONED MINES FINDS ECHO DOCKET HWC UXO FUELS PROGRAM CA BOND EXP. PLAN Cortese CUPA Listings	0.250 0.001 0.001 0.001 1.000 0.250 1.000 0.500 0.250		0 0 0 0 0 0	0 NR NR NR 0 0 0	NR NR NR NR O NR O NR	NR NR NR NR O NR O NR	NR NR NR NR NR NR NR	0 0 0 0 0 0 0

Detahasa	Search Distance	Target	. 1/0	1/0 1/4	4/4 4/2	1/0 1	. 1	Total
<u>Database</u>	(Miles)	Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	<u>> 1</u>	Plotted
CUPA Listings DRYCLEANERS EMI ENF Financial Assurance HAZNET ICE HIST CORTESE HWP HWT MINES MWMP NPDES San Bern. Co. Permit PEST LIC PROC Notify 65 UIC UIC GEO WASTEWATER PITS WDS WIP MILITARY PRIV SITES PROJECT WDR CIWQS CERS NON-CASE INFO OTHER OIL GAS PROD WATER PONDS SAMPLING POINT WELL STIM PROJ	0.250 0.250 0.250 0.001 0.001 0.001 0.001 0.500 1.000 0.250 0.250 0.250 0.001 0.500 1.000 0.001 0.500 1.000 0.001 0.500 0.001 0.250 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001	<u></u>	000000000000000000000000000000000000000	0 O NR NR NR O O O O O O R O R O R O R O	NR NR NR O O RR NR NR O O RR O R NR N			0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
MINES MRDS HWTS	0.001 TP		0 NR	NR NR	NR NR	NR NR	NR NR	0 0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP EDR Hist Auto EDR Hist Cleaner	1.000 0.125 0.125		0 0 0	0 NR NR	0 NR NR	0 NR NR	NR NR NR	0 0 0
EDR RECOVERED GOVERN	MENT ARCHIV	ES						
Exclusive Recovered Gov	t. Archives							
RGA LF RGA LUST	0.001 0.001		0 0	NR NR	NR NR	NR NR	NR NR	0 0
- Totals		0	4	0	0	1	0	5

Search

Distance (Miles)

Target Property

< 1/8 1/8 - 1/4

1/4 - 1/2

1/2 - 1

Total > 1 Plotted

NOTES:

Database

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID MAP FINDINGS

Direction Distance

Distance Elevation Site EDR ID Number

EDR ID Number

EPA ID Number

HELENDALE CSD - WELL #6 San Bern. Co. Permit S111160518
orth 26081 HELENDALE RD CERS N/A

North 26081 HELENDALE RD < 1/8 HELENDALE, CA 92342

0.003 mi. 18 ft.

Relative: San Bern. Co. Permit:

LowerName:HELENDALE CSD - WELL #6Actual:Address:26081 HELENDALE RD2480 ft.City,State,Zip:HELENDALE, CA 92342Region:SAN BERNARDINO

Facility ID: FA0010036
Owner: HELENDALE CSD
Permit Number: PT0017161

Permit Category: HAZARDOUS MATERIALS 1-3 CHEMICALS SPECIAL

Facility Status: ACTIVE Expiration Date: 10/31/2020

CERS:

Name: HELENDALE CSD - WELL #6
Address: 26081 HELENDALE RD
City,State,Zip: HELENDALE, CA 92342

 Site ID:
 122154

 CERS ID:
 10050682

CERS Description: Chemical Storage Facilities

Evaluation:

Eval General Type: Compliance Evaluation Inspection

Eval Date: 07-25-2013

Violations Found: No

Eval Type: Routine done by local agency Eval Notes: helendale csd well#6-insp

Eval Division: San Bernardino County Fire Department

Eval Program: HMRRP Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection

Eval Date: 10-27-2016

Violations Found: No

Eval Type: Routine done by local agency Eval Notes: HANDLER INSPECTION

Eval Division: San Bernardino County Fire Department

Eval Program: HMRRP Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection

Eval Date: 01-15-2020

Violations Found: No

Eval Type: Routine done by local agency

Eval Notes: Not reported

Eval Division: San Bernardino County Fire Department

Eval Program: HMRRP Eval Source: CERS

Affiliation:

Affiliation Type Desc: Parent Corporation

Entity Name: Helendale Community Services District

Entity Title: Not reported Affiliation Address: Not reported

Direction Distance Elevation

ation Site Database(s) EPA ID Number

HELENDALE CSD - WELL #6 (Continued)

S111160518

EDR ID Number

Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District

Entity Name: San Bernardino County Fire

Entity Title: Not reported
Affiliation Address: 620 South E Street
Affiliation City: San Bernardino

Affiliation State: CA

Affiliation Country: Not reported
Affiliation Zip: 92415-0153
Affiliation Phone: (909) 386-8401

Affiliation Type Desc: **Document Preparer** Cheryl Vermette **Entity Name: Entity Title:** Not reported Affiliation Address: Not reported Affiliation City: Not reported Affiliation State: Not reported Affiliation Country: Not reported Affiliation Zip: Not reported Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact

Entity Name: Kimberly Cox
Entity Title: Not reported
Affiliation Address: PO BOX 359
Affiliation City: HELENDALE

Affiliation State: CA

Affiliation Country: Not reported Affiliation Zip: 92342
Affiliation Phone: Not reported

Affiliation Type Desc: Property Owner
Entity Name: Helendale CSD
Entity Title: Not reported

Affiliation Address: 26081 HELENDALE RD

Affiliation City: HELENDALE

Affiliation State: CA

Affiliation Country: United States
Affiliation Zip: 92342

Affiliation Phone: (760) 951-0006

Affiliation Type Desc: Facility Mailing Address

Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: PO BOX 359
Affiliation City: HELENDALE

Affiliation State: CA

Affiliation Country: Not reported
Affiliation Zip: 92342
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer

Direction Distance

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

HELENDALE CSD - WELL #6 (Continued)

S111160518

Entity Name: Kimberly Cox Entity Title: General Manager Affiliation Address: Not reported Affiliation City: Not reported Affiliation State: Not reported Affiliation Country: Not reported Affiliation Zip: Not reported Affiliation Phone: Not reported

Affiliation Type Desc: Operator

Entity Name: CRAIG CARLSON Entity Title: Not reported Affiliation Address: Not reported Affiliation City: Not reported Affiliation State: Not reported Affiliation Country: Not reported Affiliation Zip: Not reported Affiliation Phone: (760) 951-0006

Affiliation Type Desc: Legal Owner **Entity Name:** Helendale CSD Entity Title: Not reported Affiliation Address: P.O. BOX 359 Affiliation City: HELENDALE Affiliation State: CA Affiliation Country: **United States** Affiliation Zip: 92342 Affiliation Phone: (760) 951-0006

2 HELENDALE CSD - WELL #4 San Bern. Co. Permit S112142705 NNE 26161 BALBOA CT CERS N/A

NNE 26161 BALBOA CT < 1/8 HELENDALE, CA 92342

0.029 mi. 151 ft.

Relative: San Bern. Co. Permit:

Lower Name: HELENDALE CSD - WELL #4

Actual: Address: 26161 BALBOA CT
2464 ft. City,State,Zip: HELENDALE, CA 92342
Region: SAN BERNARDINO

Facility ID: FA0010034
Owner: HELENDALE CSD
Permit Number: PT0025669

Permit Category: HAZARDOUS MATERIALS 1-3 CHEMICALS SPECIAL

Facility Status: INACTIVE Expiration Date: 09/30/2020

CERS:

Name: HELENDALE CSD - WELL #4

Address: 26161 BALBOA CT City,State,Zip: HELENDALE, CA 92342

 Site ID:
 122153

 CERS ID:
 10310878

CERS Description: Chemical Storage Facilities

Violations:

Site ID: 122153

Direction Distance

Elevation Site Database(s) EPA ID Number

HELENDALE CSD - WELL #4 (Continued)

S112142705

EDR ID Number

Site Name: HELENDALE CSD - WELL #4

Violation Date: 01-15-2020

Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95,

Section(s) 25508.2

Violation Description: Failure to annually review and electronically certify that the

business plan is complete and accurate on or before the annual due

date.

Violation Notes: Returned to compliance on 01/17/2020. OBSERVATION: The last business

plan submitted by this facility via CERS was dated 8/9/2018.

CORRECTIVE ACTION: Update the business plan via CERS. CERS

ID#10310878.

Violation Division: San Bernardino County Fire Department

Violation Program: HMRRP Violation Source: CERS

Evaluation:

Eval General Type: Compliance Evaluation Inspection

Eval Date: 01-15-2020 Violations Found: Yes

Eval Type: Routine done by local agency

Eval Notes: Not reported

Eval Division: San Bernardino County Fire Department

Eval Program: HMRRP Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection

Eval Date: 07-25-2013

Violations Found: No

Eval Type: Routine done by local agency Eval Notes: helendale csd well#4-insp

Eval Division: San Bernardino County Fire Department

Eval Program: HMRRP Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection

Eval Date: 10-27-2016

Violations Found: No

Eval Type: Routine done by local agency
Eval Notes: HANDLER INSPECTION

Eval Division: San Bernardino County Fire Department

Eval Program: HMRRP Eval Source: CERS

Coordinates:

Site ID: 122153

Facility Name: HELENDALE CSD - WELL #4

Env Int Type Code: HMBP
Program ID: 10310878
Coord Name: Not reported

Ref Point Type Desc: Center of a facility or station.

Latitude: 34.727050 Longitude: -117.344830

Affiliation:

Affiliation Type Desc: Identification Signer Entity Name: Kimberly Cox

Direction Distance Elevation

ion Site Database(s) EPA ID Number

HELENDALE CSD - WELL #4 (Continued)

S112142705

EDR ID Number

Entity Title: General Manager
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District

Entity Name: San Bernardino County Fire

Entity Title: Not reported
Affiliation Address: 620 South E Street
Affiliation City: San Bernardino

Affiliation State: CA

Affiliation Country: Not reported
Affiliation Zip: 92415-0153
Affiliation Phone: (909) 386-8401

Affiliation Type Desc: Environmental Contact

Entity Name: Kimberly Cox
Entity Title: Not reported
Affiliation Address: P O BOX 359
Affiliation City: HELENDALE

Affiliation State: CA

Affiliation Country: Not reported
Affiliation Zip: 92342
Affiliation Phone: Not reported

Affiliation Type Desc: Operator

Entity Name: CRAIG CARLSON Entity Title: Not reported Affiliation Address: Not reported Affiliation City: Not reported Affiliation State: Not reported Affiliation Country: Not reported Affiliation Zip: Not reported Affiliation Phone: (760) 951-0006

Affiliation Type Desc:

Entity Name:

Entity Title:

Affiliation Address:

Affiliation City:

Property Owner

Helendale CSD

Not reported

26161 BALBOA CT

HELENDALE

Affiliation State: CA

Affiliation Country: United States
Affiliation Zip: 92342

Affiliation Phone: (760) 951-0006

Affiliation Type Desc: **Document Preparer** Entity Name: Cheryl Vermette Entity Title: Not reported Affiliation Address: Not reported Affiliation City: Not reported Affiliation State: Not reported Affiliation Country: Not reported Affiliation Zip: Not reported Affiliation Phone: Not reported

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

HELENDALE CSD - WELL #4 (Continued)

S112142705

Affiliation Type Desc: Facility Mailing Address Mailing Address **Entity Name:** Entity Title: Not reported Affiliation Address: PO BOX 359 **HELENDALE** Affiliation City:

Affiliation State: CA

Affiliation Country: Not reported Affiliation Zip: 92342 Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner Entity Name: Helendale CSD Entity Title: Not reported P.O. BOX 359 Affiliation Address: Affiliation City: HELENDALE

Affiliation State: CA

Affiliation Country: **United States** 92342 Affiliation Zip:

(760) 951-0006 Affiliation Phone:

Affiliation Type Desc: Parent Corporation

Entity Name: Helendale Community Services District

Entity Title: Not reported Affiliation Address: Not reported Affiliation City: Not reported Affiliation State: Not reported Affiliation Country: Not reported Affiliation Zip: Not reported Affiliation Phone: Not reported

А3 **HELENDALE CSD - WELLS #2**

San Bern. Co. Permit S111160517 NNE **26275 CORONA DR** N/A

< 1/8 HELENDALE, CA 92342

0.038 mi.

200 ft. Site 1 of 2 in cluster A Relative: San Bern. Co. Permit:

Lower HELENDALE CSD - WELLS #2 Name:

Address: 26275 CORONA DR Actual: City,State,Zip: HELENDALE, CA 92342 2454 ft. Region: SAN BERNARDINO

Facility ID: FA0010033 Owner: HELENDALE CSD Permit Number: PT0017160

Permit Category: HAZMAT HANDLER 0-10 EMPLOYEES

Facility Status: **INACTIVE** Expiration Date: 10/31/2011

Direction Distance

Distance Elevation Site EDR ID Number

EDR ID Number

EPA ID Number

A4 HELENDALE CSD - WELL #1 San Bern. Co. Permit S111160515
NNE 26257 CORONA DR CERS N/A

NNE 26257 CORONA DR < 1/8 HELENDALE, CA 92342

0.041 mi.

219 ft. Site 2 of 2 in cluster A

Relative: San Bern. Co. Permit:

Lower Name: HELENDALE CSD - WELL #1
Actual: Address: 26257 CORONA DR

Actual: 26257 CORONA DR
2457 ft. City,State,Zip: HELENDALE, CA 92342
Region: SAN BERNARDINO

Facility ID: FA0010026
Owner: HELENDALE CSD
Permit Number: PT0024471

Permit Category: HAZARDOUS MATERIALS 1-3 CHEMICALS SPECIAL

Facility Status: INACTIVE Expiration Date: 10/31/2020

CERS:

Name: HELENDALE CSD - WELL #1
Address: 26257 CORONA DR
City,State,Zip: HELENDALE, CA 92342

 Site ID:
 122151

 CERS ID:
 10310875

CERS Description: Chemical Storage Facilities

Evaluation:

Eval General Type: Compliance Evaluation Inspection

Eval Date: 07-24-2013

Violations Found: No

Eval Type: Routine done by local agency
Eval Notes: helendale csd well#1-insp prep

Eval Division: San Bernardino County Fire Department

Eval Program: HMRRP Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection

Eval Date: 07-25-2013 Violations Found: No

Eval Type: Routine done by local agency Eval Notes: helendale csd well#1-insp

Eval Division: San Bernardino County Fire Department

Eval Program: HMRRP Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection

Eval Date: 01-15-2020

Violations Found: No

Eval Type: Routine done by local agency

Eval Notes: Not reported

Eval Division: San Bernardino County Fire Department

Eval Program: HMRRP Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection

Eval Date: 10-27-2016

Violations Found: No

Eval Type: Routine done by local agency Eval Notes: HANDLER INSPECTION

Direction Distance

Elevation Site Database(s) EPA ID Number

HELENDALE CSD - WELL #1 (Continued)

S111160515

EDR ID Number

Eval Division: San Bernardino County Fire Department

Eval Program: HMRRP Eval Source: CERS

Coordinates:

Site ID: 122151

Facility Name: HELENDALE CSD - WELL #1

Env Int Type Code: HMBP
Program ID: 10310875
Coord Name: Not reported

Ref Point Type Desc: Center of a facility or station.

Latitude: 34.729340 Longitude: -117.342890

Affiliation:

Affiliation Type Desc: Environmental Contact

Entity Name: Kimberly Cox Entity Title: Not reported Affiliation Address: PO BOX 359 Affiliation City: HELENDALE

Affiliation State: CA

Affiliation Country: Not reported
Affiliation Zip: 92342
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address

Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: PO BOX 359
Affiliation City: HELENDALE

Affiliation State: CA

Affiliation Country: Not reported Affiliation Zip: 92342
Affiliation Phone: Not reported

Affiliation Type Desc: Operator

Entity Name: CRAIG CARLSON **Entity Title:** Not reported Affiliation Address: Not reported Affiliation City: Not reported Affiliation State: Not reported Affiliation Country: Not reported Not reported Affiliation Zip: Affiliation Phone: (760) 951-0006

Affiliation Type Desc:

Entity Name:

Helendale CSD
Entity Title:

Not reported
Affiliation Address:

P.O. BOX 359
Affiliation City:

HELENDALE

Affiliation State: CA

Affiliation Country: United States
Affiliation Zip: 92342

Affiliation Phone: (760) 951-0006

Affiliation Type Desc: Parent Corporation

Direction Distance

Elevation Site Database(s) EPA ID Number

HELENDALE CSD - WELL #1 (Continued)

S111160515

ENVIROSTOR S118757173

N/A

SCH

EDR ID Number

Entity Name: Helendale Community Services District

Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District

Entity Name: San Bernardino County Fire

Entity Title: Not reported
Affiliation Address: 620 South E Street
Affiliation City: San Bernardino

Affiliation State: CA

Affiliation Country: Not reported
Affiliation Zip: 92415-0153
Affiliation Phone: (909) 386-8401

5 RIVERS EDGE MIDDLE SCHOOL NW RIVERS EDGE ROAD/VOYAGE LANE

1/2-1 HELENDALE, CA 92342

0.850 mi. 4490 ft.

Relative: ENVIROSTOR:

 Higher
 Name:
 RIVERS EDGE MIDDLE SCHOOL

 Actual:
 Address:
 RIVERS EDGE ROAD/VOYAGE LANE

2488 ft. City,State,Zip: HELENDALE, CA 92342 Facility ID: 60000839

Status: No Action Required

Status Date: 04/02/2008

Site Code: 404781

Site Type: School Investigation

Site Type Detailed: School
Acres: 14.59
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Amit Pathak
Supervisor: Shahir Haddad

Division Branch: Southern California Schools & Brownfields Outreach

Assembly: 33 Senate: 16

Special Program: Not reported

Restricted Use: NO

Site Mgmt Req: NONE SPECIFIED Funding: School District Latitude: 34.73458 Longitude: -117.3575 APN: NONE SPECIFIED

Past Use: NONE

Potential COC: NONE SPECIFIED No Contaminants found

Confirmed COC: 31000-NO
Potential Description: SOIL

Alias Name: 404781

Alias Type: Project Code (Site Code)

Direction Distance

Elevation Site Database(s) EPA ID Number

RIVERS EDGE MIDDLE SCHOOL (Continued)

S118757173

EDR ID Number

Alias Name: 60000839

Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Cost Recovery Closeout Memo

Completed Date: 04/01/2008

Comments: Project Close out Cost Recovery Unit Memorandum.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Phase 1
Completed Date: 03/25/2008

Comments: DTSC approved the Phase I report with a No Action determination

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 Not reported Schedule Sub Area Name: Schedule Document Type: Not reported Schedule Due Date: Not reported Not reported Schedule Revised Date:

SCH:

Name: RIVERS EDGE MIDDLE SCHOOL
Address: RIVERS EDGE ROAD/VOYAGE LANE

City, State, Zip: HELENDALE, CA 92342

Facility ID: 60000839

Site Type: School Investigation

Site Type Detail: School

Site Mgmt. Req.: NONE SPECIFIED

Acres: 14.59
National Priorities List: NO
Cleanup Oversight Agencies: SMBRP
Lead Agency: SMBRP

Lead Agency Description: DTSC - Site Cleanup Program

Project Manager: Amit Pathak Supervisor: Shahir Haddad

Division Branch: Southern California Schools & Brownfields Outreach

 Site Code:
 404781

 Assembly:
 33

 Senate:
 16

Special Program Status: Not reported
Status: No Action Required
Status Date: 04/02/2008

Status Date: 04/02/2008
Restricted Use: NO
Funding: School District
Latitude: 34.73458
Longitude: -117.3575

APN: NONE SPECIFIED

Past Use: NONE

Potential COC: NONE SPECIFIED, No Contaminants found

Confirmed COC: 31000-NO

Direction Distance

Elevation Site Database(s) EPA ID Number

RIVERS EDGE MIDDLE SCHOOL (Continued)

S118757173

EDR ID Number

Potential Description: SOIL Alias Name: 404781

Alias Type: Project Code (Site Code)

Alias Name: 60000839

Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Cost Recovery Closeout Memo

Completed Date: 04/01/2008

Comments: Project Close out Cost Recovery Unit Memorandum.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Phase 1
Completed Date: 03/25/2008

Comments: DTSC approved the Phase I report with a No Action determination

Future Area Name: Not reported Not reported Future Sub Area Name: Future Document Type: Not reported Not reported Future Due Date: Schedule Area Name: Not reported Not reported Schedule Sub Area Name: Not reported Schedule Document Type: Schedule Due Date: Not reported Schedule Revised Date: Not reported

Count: 1 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
HELENDALE	S107539526	5	NEAR INTERSECTION OF HIGHWAY 3	92342	

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 07/29/2020 Source: EPA
Date Data Arrived at EDR: 08/03/2020 Telephone: N/A

Date Made Active in Reports: 08/25/2020 Last EDR Contact: 08/03/2020

Number of Days to Update: 22 Next Scheduled EDR Contact: 10/12/2020
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources

EPA's Environmental Photographic Interpretation Center (EPIC)

Telephone: 202-564-7333

EPA Region 1 EPA Region 6

Telephone 617-918-1143 Telephone: 214-655-6659

EPA Region 3 EPA Region 7

Telephone 215-814-5418 Telephone: 913-551-7247

EPA Region 4 EPA Region 8

Telephone 404-562-8033 Telephone: 303-312-6774

EPA Region 5 EPA Region 9

Telephone 312-886-6686 Telephone: 415-947-4246

EPA Region 10

Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 07/29/2020 Source: EPA
Date Data Arrived at EDR: 08/03/2020 Telephone: N/A

Date Made Active in Reports: 08/25/2020 Last EDR Contact: 08/03/2020 Number of Days to Update: 22 Next Scheduled EDR Contact:

Next Scheduled EDR Contact: 10/12/2020
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991 Date Data Arrived at EDR: 02/02/1994 Date Made Active in Reports: 03/30/1994

Number of Days to Update: 56

Source: EPA

Telephone: 202-564-4267 Last EDR Contact: 08/15/2011

Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 07/29/2020 Date Data Arrived at EDR: 08/03/2020 Date Made Active in Reports: 08/25/2020

Number of Days to Update: 22

Source: EPA Telephone: N/A

Last EDR Contact: 08/03/2020

Next Scheduled EDR Contact: 10/12/2020 Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 04/03/2019 Date Data Arrived at EDR: 04/05/2019 Date Made Active in Reports: 05/14/2019

Number of Days to Update: 39

Source: Environmental Protection Agency Telephone: 703-603-8704

Last EDR Contact: 07/02/2020

Next Scheduled EDR Contact: 10/12/2020 Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 07/29/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 08/25/2020
Number of Days to Lindate: 22

Number of Days to Update: 22

Source: EPA Telephone: 800-424-9346 Last EDR Contact: 08/03/2020

Next Scheduled EDR Contact: 10/26/2020 Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 07/29/2020 Date Data Arrived at EDR: 08/03/2020 Date Made Active in Reports: 08/25/2020

Number of Days to Update: 22

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 08/03/2020

Next Scheduled EDR Contact: 10/26/2020 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: 03/23/2020 Date Data Arrived at EDR: 03/25/2020 Date Made Active in Reports: 05/21/2020

Number of Days to Update: 57

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 06/22/2020

Next Scheduled EDR Contact: 10/05/2020 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: 03/23/2020 Date Data Arrived at EDR: 03/25/2020 Date Made Active in Reports: 05/21/2020

Number of Days to Update: 57

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 06/22/2020

Next Scheduled EDR Contact: 10/05/2020 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: 03/23/2020 Date Data Arrived at EDR: 03/25/2020 Date Made Active in Reports: 05/21/2020

Number of Days to Update: 57

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 06/22/2020

Next Scheduled EDR Contact: 10/05/2020 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: 03/23/2020 Date Data Arrived at EDR: 03/25/2020 Date Made Active in Reports: 05/21/2020

Number of Days to Update: 57

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 06/22/2020

Next Scheduled EDR Contact: 10/05/2020 Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation
and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database
includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste
as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate
less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/23/2020 Date Data Arrived at EDR: 03/25/2020 Date Made Active in Reports: 05/21/2020

Number of Days to Update: 57

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 06/22/2020

Next Scheduled EDR Contact: 10/05/2020 Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/15/2020 Date Data Arrived at EDR: 05/19/2020 Date Made Active in Reports: 06/18/2020

Number of Days to Update: 30

Source: Department of the Navy Telephone: 843-820-7326 Last EDR Contact: 08/04/2020

Next Scheduled EDR Contact: 11/23/2020 Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 02/13/2020 Date Data Arrived at EDR: 02/20/2020 Date Made Active in Reports: 05/15/2020

Number of Days to Update: 85

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 08/24/2020

Next Scheduled EDR Contact: 09/07/2020 Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 02/13/2020 Date Data Arrived at EDR: 02/20/2020 Date Made Active in Reports: 05/15/2020

Number of Days to Update: 85

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 08/24/2020

Next Scheduled EDR Contact: 12/07/2020

Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 03/22/2020 Date Data Arrived at EDR: 03/24/2020 Date Made Active in Reports: 06/18/2020

Number of Days to Update: 86

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180 Last EDR Contact: 06/22/2020

Next Scheduled EDR Contact: 10/05/2020 Data Release Frequency: Quarterly

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity.

These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 04/27/2020 Date Data Arrived at EDR: 04/28/2020 Date Made Active in Reports: 07/13/2020

Number of Days to Update: 76

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 07/27/2020

Next Scheduled EDR Contact: 11/09/2020 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: 04/27/2020 Date Data Arrived at EDR: 04/28/2020 Date Made Active in Reports: 07/13/2020

Number of Days to Update: 76

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 07/27/2020

Next Scheduled EDR Contact: 11/09/2020 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 inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 05/11/2020 Date Data Arrived at EDR: 05/12/2020 Date Made Active in Reports: 07/27/2020

Number of Days to Update: 76

Source: Department of Resources Recycling and Recovery

Telephone: 916-341-6320 Last EDR Contact: 08/10/2020

Next Scheduled EDR Contact: 11/23/2020 Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004 Date Data Arrived at EDR: 10/20/2004 Date Made Active in Reports: 11/19/2004

Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)

Telephone: 510-622-2433 Last EDR Contact: 09/19/2011

Next Scheduled EDR Contact: 01/02/2012 Data Release Frequency: No Update Planned

LUST REG 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

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 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)

Source: California Regional Water Quality Control Board Central Coast Region (3)

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 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001 Date Data Arrived at EDR: 04/23/2001 Date Made Active in Reports: 05/21/2001

Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)

Telephone: 858-637-5595 Last EDR Contact: 09/26/2011

Next Scheduled EDR Contact: 01/09/2012 Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005 Date Data Arrived at EDR: 02/15/2005 Date Made Active in Reports: 03/28/2005

Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)

Telephone: 909-782-4496 Last EDR Contact: 08/15/2011

Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: No Update Planned

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 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 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 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 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: Leaking Underground Fuel Tank Report (GEOTRACKER)

Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/08/2020 Date Data Arrived at EDR: 06/09/2020 Date Made Active in Reports: 08/19/2020

Number of Days to Update: 71

Source: State Water Resources Control Board

Telephone: see region list Last EDR Contact: 06/09/2020

Next Scheduled EDR Contact: 09/21/2020 Data Release Frequency: Quarterly

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/14/2020 Date Data Arrived at EDR: 05/20/2020 Date Made Active in Reports: 08/12/2020

Number of Days to Update: 84

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 07/24/2020

Next Scheduled EDR Contact: 11/02/2020 Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 04/14/2020 Date Data Arrived at EDR: 05/26/2020 Date Made Active in Reports: 08/12/2020

Number of Days to Update: 78

Source: EPA Region 4 Telephone: 404-562-8677 Last EDR Contact: 07/24/2020

Next Scheduled EDR Contact: 11/02/2020

Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/14/2020 Date Data Arrived at EDR: 05/20/2020 Date Made Active in Reports: 08/12/2020

Number of Days to Update: 84

Source: EPA, Region 5 Telephone: 312-886-7439 Last EDR Contact: 07/24/2020

Next Scheduled EDR Contact: 11/02/2020 Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/29/2020 Date Data Arrived at EDR: 05/20/2020 Date Made Active in Reports: 08/12/2020

Number of Days to Update: 84

Source: EPA Region 1 Telephone: 617-918-1313 Last EDR Contact: 07/24/2020

Next Scheduled EDR Contact: 11/02/2020 Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/08/2020 Date Data Arrived at EDR: 05/20/2020 Date Made Active in Reports: 08/12/2020

Number of Days to Update: 84

Source: EPA Region 6 Telephone: 214-665-6597 Last EDR Contact: 07/24/2020

Next Scheduled EDR Contact: 11/02/2020 Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/15/2020 Date Data Arrived at EDR: 05/20/2020 Date Made Active in Reports: 08/12/2020

Number of Days to Update: 84

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 07/24/2020

Next Scheduled EDR Contact: 11/02/2020 Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/14/2020 Date Data Arrived at EDR: 05/20/2020 Date Made Active in Reports: 08/12/2020

Number of Days to Update: 84

Source: EPA Region 8 Telephone: 303-312-6271 Last EDR Contact: 07/24/2020

Next Scheduled EDR Contact: 11/02/2020 Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/08/2020 Date Data Arrived at EDR: 05/20/2020 Date Made Active in Reports: 08/12/2020

Number of Days to Update: 84

Source: Environmental Protection Agency

Telephone: 415-972-3372 Last EDR Contact: 07/24/2020

Next Scheduled EDR Contact: 11/02/2020 Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)

Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/08/2020 Date Data Arrived at EDR: 06/09/2020 Date Made Active in Reports: 08/19/2020

Number of Days to Update: 71

Source: State Water Resources Control Board Telephone: 866-480-1028

Last EDR Contact: 06/09/2020

Next Scheduled EDR Contact: 09/21/2020

Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003 Date Data Arrived at EDR: 04/07/2003 Date Made Active in Reports: 04/25/2003

Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)

Telephone: 707-576-2220 Last EDR Contact: 08/01/2011

Next Scheduled EDR Contact: 11/14/2011 Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004 Date Data Arrived at EDR: 10/20/2004 Date Made Active in Reports: 11/19/2004

Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)

Telephone: 510-286-0457 Last EDR Contact: 09/19/2011

Next Scheduled EDR Contact: 01/02/2012 Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006 Date Data Arrived at EDR: 05/18/2006 Date Made Active in Reports: 06/15/2006

Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)

Telephone: 805-549-3147 Last EDR Contact: 07/18/2011

Next Scheduled EDR Contact: 10/31/2011 Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004 Date Data Arrived at EDR: 11/18/2004 Date Made Active in Reports: 01/04/2005

Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)

Telephone: 213-576-6600 Last EDR Contact: 07/01/2011

Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005 Date Data Arrived at EDR: 04/05/2005 Date Made Active in Reports: 04/21/2005

Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)

Telephone: 916-464-3291 Last EDR Contact: 09/12/2011

Next Scheduled EDR Contact: 12/26/2011 Data Release Frequency: No Update Planned

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005 Date Data Arrived at EDR: 05/25/2005 Date Made Active in Reports: 06/16/2005

Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch

Telephone: 619-241-6583 Last EDR Contact: 08/15/2011

Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: No Update Planned

SLIC REG 6L: SLIC Sites

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004 Date Data Arrived at EDR: 09/07/2004 Date Made Active in Reports: 10/12/2004

Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region

Telephone: 530-542-5574 Last EDR Contact: 08/15/2011

Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004 Date Data Arrived at EDR: 11/29/2004 Date Made Active in Reports: 01/04/2005

Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region

Telephone: 760-346-7491 Last EDR Contact: 08/01/2011

Next Scheduled EDR Contact: 11/14/2011 Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008 Date Data Arrived at EDR: 04/03/2008 Date Made Active in Reports: 04/14/2008

Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)

Telephone: 951-782-3298 Last EDR Contact: 09/12/2011

Next Scheduled EDR Contact: 12/26/2011 Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007 Date Data Arrived at EDR: 09/11/2007 Date Made Active in Reports: 09/28/2007

Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)

Telephone: 858-467-2980 Last EDR Contact: 08/08/2011

Next Scheduled EDR Contact: 11/21/2011 Data Release Frequency: No Update Planned

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 02/01/2020 Date Data Arrived at EDR: 03/19/2020 Date Made Active in Reports: 06/09/2020

Number of Days to Update: 82

Source: FEMA

Telephone: 202-646-5797 Last EDR Contact: 07/06/2020

Next Scheduled EDR Contact: 10/19/2020 Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)

Military ust sites

Date of Government Version: 06/08/2020 Date Data Arrived at EDR: 06/09/2020 Date Made Active in Reports: 08/19/2020

Number of Days to Update: 71

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 06/09/2020

Next Scheduled EDR Contact: 09/21/2020

Data Release Frequency: Varies

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 06/08/2020 Date Data Arrived at EDR: 06/09/2020 Date Made Active in Reports: 08/20/2020

Number of Days to Update: 72

Source: SWRCB Telephone: 916-341-5851 Last EDR Contact: 06/09/2020

Next Scheduled EDR Contact: 09/21/2020 Data Release Frequency: Semi-Annually

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases

UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 05/26/2020 Date Data Arrived at EDR: 06/09/2020 Date Made Active in Reports: 08/20/2020

Number of Days to Update: 72

Source: State Water Resources Control Board

Telephone: 916-327-7844 Last EDR Contact: 06/09/2020

Next Scheduled EDR Contact: 09/21/2020 Data Release Frequency: Varies

AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016 Date Data Arrived at EDR: 07/12/2016 Date Made Active in Reports: 09/19/2016

Number of Days to Update: 69

Source: California Environmental Protection Agency

Telephone: 916-327-5092 Last EDR Contact: 06/10/2020

Next Scheduled EDR Contact: 09/28/2020 Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 04/14/2020 Date Data Arrived at EDR: 05/26/2020 Date Made Active in Reports: 08/12/2020

Number of Days to Update: 78

Source: EPA Region 4 Telephone: 404-562-9424 Last EDR Contact: 07/24/2020

Next Scheduled EDR Contact: 11/02/2020 Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/14/2020 Date Data Arrived at EDR: 05/20/2020 Date Made Active in Reports: 08/12/2020

Number of Days to Update: 84

Source: EPA Region 5 Telephone: 312-886-6136 Last EDR Contact: 07/24/2020

Next Scheduled EDR Contact: 11/02/2020 Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/14/2020 Date Data Arrived at EDR: 05/20/2020 Date Made Active in Reports: 08/12/2020

Number of Days to Update: 84

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 07/24/2020

Next Scheduled EDR Contact: 11/02/2020 Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/03/2020 Date Data Arrived at EDR: 05/20/2020 Date Made Active in Reports: 08/12/2020

Number of Days to Update: 84

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 07/24/2020

Next Scheduled EDR Contact: 11/02/2020 Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/08/2020 Date Data Arrived at EDR: 05/20/2020 Date Made Active in Reports: 08/12/2020

Number of Days to Update: 84

Source: EPA Region 6 Telephone: 214-665-7591 Last EDR Contact: 07/24/2020

Next Scheduled EDR Contact: 11/02/2020 Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/08/2020 Date Data Arrived at EDR: 05/20/2020 Date Made Active in Reports: 08/12/2020

Number of Days to Update: 84

Source: EPA Region 9 Telephone: 415-972-3368 Last EDR Contact: 07/23/2020

Next Scheduled EDR Contact: 11/01/2020

Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/29/2020 Date Data Arrived at EDR: 05/20/2020 Date Made Active in Reports: 08/12/2020

Number of Days to Update: 84

Source: EPA, Region 1 Telephone: 617-918-1313 Last EDR Contact: 07/24/2020

Next Scheduled EDR Contact: 11/02/2020 Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 04/14/2020 Date Data Arrived at EDR: 05/20/2020 Date Made Active in Reports: 08/13/2020

Number of Days to Update: 85

Source: EPA Region 8 Telephone: 303-312-6137 Last EDR Contact: 07/24/2020

Next Scheduled EDR Contact: 11/02/2020 Data Release Frequency: Varies

State and tribal voluntary cleanup sites

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: 04/27/2020 Date Data Arrived at EDR: 04/28/2020 Date Made Active in Reports: 07/13/2020

Number of Days to Update: 76

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 07/27/2020

Next Scheduled EDR Contact: 11/09/2020 Data Release Frequency: Quarterly

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

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: 06/17/2020

Next Scheduled EDR Contact: 10/05/2020

Data Release Frequency: Varies

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: 03/23/2020 Date Data Arrived at EDR: 03/24/2020 Date Made Active in Reports: 06/05/2020

Number of Days to Update: 73

Source: State Water Resources Control Board

Telephone: 916-323-7905 Last EDR Contact: 06/22/2020

Next Scheduled EDR Contact: 10/05/2020 Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/01/2020 Date Data Arrived at EDR: 06/02/2020 Date Made Active in Reports: 06/09/2020

Number of Days to Update: 7

Source: Environmental Protection Agency

Telephone: 202-566-2777 Last EDR Contact: 06/02/2020

Next Scheduled EDR Contact: 09/28/2020 Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000 Date Data Arrived at EDR: 04/10/2000 Date Made Active in Reports: 05/10/2000

Number of Days to Update: 30

Source: State Water Resources Control Board

Telephone: 916-227-4448 Last EDR Contact: 07/21/2020

Next Scheduled EDR Contact: 11/09/2020 Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 06/08/2020 Date Data Arrived at EDR: 06/09/2020 Date Made Active in Reports: 08/19/2020

Number of Days to Update: 71

Source: Department of Conservation

Telephone: 916-323-3836 Last EDR Contact: 06/09/2020

Next Scheduled EDR Contact: 09/21/2020 Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing A listing of registered waste tire haulers.

Date of Government Version: 05/28/2020 Date Data Arrived at EDR: 05/29/2020 Date Made Active in Reports: 08/12/2020

Number of Days to Update: 75

Source: Integrated Waste Management Board

Telephone: 916-341-6422 Last EDR Contact: 08/04/2020

Next Scheduled EDR Contact: 11/23/2020 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: 07/21/2020

Next Scheduled EDR Contact: 11/09/2020 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: 07/14/2020

Next Scheduled EDR Contact: 11/02/2020 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: 07/31/2020

Next Scheduled EDR Contact: 11/09/2020

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: 03/18/2020 Date Data Arrived at EDR: 03/19/2020 Date Made Active in Reports: 06/09/2020

Number of Days to Update: 82

Source: Drug Enforcement Administration

Telephone: 202-307-1000 Last EDR Contact: 08/19/2020

Next Scheduled EDR Contact: 12/07/2020 Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005 Date Data Arrived at EDR: 08/03/2006 Date Made Active in Reports: 08/24/2006

Number of Days to Update: 21

Source: Department of Toxic Substance Control

Telephone: 916-323-3400 Last EDR Contact: 02/23/2009

Next Scheduled EDR Contact: 05/25/2009 Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 04/27/2020 Date Data Arrived at EDR: 04/28/2020 Date Made Active in Reports: 07/13/2020

Number of Days to Update: 76

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 07/27/2020

Next Scheduled EDR Contact: 11/09/2020 Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 06/30/2019 Date Data Arrived at EDR: 05/28/2020 Date Made Active in Reports: 08/12/2020

Number of Days to Update: 76

Source: Department of Toxic Substances Control

Telephone: 916-255-6504 Last EDR Contact: 07/09/2020

Next Scheduled EDR Contact: 10/19/2020

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

CERS HAZ WASTE: CERS HAZ WASTE

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 04/20/2020 Date Data Arrived at EDR: 04/21/2020 Date Made Active in Reports: 07/13/2020

Number of Days to Update: 83

Source: CalEPA

Telephone: 916-323-2514 Last EDR Contact: 07/21/2020

Next Scheduled EDR Contact: 11/02/2020 Data Release Frequency: Quarterly

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 03/18/2020 Date Data Arrived at EDR: 03/19/2020 Date Made Active in Reports: 06/09/2020

Number of Days to Update: 82

Source: Drug Enforcement Administration

Telephone: 202-307-1000 Last EDR Contact: 08/19/2020

Next Scheduled EDR Contact: 12/07/2020 Data Release Frequency: Quarterly

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 06/08/2020 Date Data Arrived at EDR: 06/09/2020 Date Made Active in Reports: 08/19/2020

Number of Days to Update: 71

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 06/09/2020

Next Scheduled EDR Contact: 09/21/2020

Data Release Frequency: Varies

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994 Date Data Arrived at EDR: 07/07/2005 Date Made Active in Reports: 08/11/2005

Number of Days to Update: 35

Source: State Water Resources Control Board

Telephone: N/A

Last EDR Contact: 06/03/2005 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 05/20/2020 Date Data Arrived at EDR: 05/20/2020 Date Made Active in Reports: 08/06/2020

Number of Days to Update: 78

Source: Department of Public Health Telephone: 707-463-4466

Last EDR Contact: 08/17/2020

Next Scheduled EDR Contact: 12/07/2020 Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990 Date Data Arrived at EDR: 01/25/1991 Date Made Active in Reports: 02/12/1991

Number of Days to Update: 18

Source: State Water Resources Control Board

Telephone: 916-341-5851 Last EDR Contact: 07/26/2001 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing

Aboveground storage tank sites

Date of Government Version: 05/04/2020 Date Data Arrived at EDR: 05/06/2020 Date Made Active in Reports: 07/17/2020

Number of Days to Update: 72

Source: San Francisco County Department of Public Health

Telephone: 415-252-3896 Last EDR Contact: 07/28/2020

Next Scheduled EDR Contact: 11/16/2020 Data Release Frequency: Varies

CERS TANKS: California Environmental Reporting System (CERS) Tanks

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 04/20/2020 Date Data Arrived at EDR: 04/21/2020 Date Made Active in Reports: 07/09/2020

Number of Days to Update: 79

Source: California Environmental Protection Agency

Telephone: 916-323-2514 Last EDR Contact: 07/21/2020

Next Scheduled EDR Contact: 11/02/2020 Data Release Frequency: Quarterly

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994 Date Data Arrived at EDR: 09/05/1995 Date Made Active in Reports: 09/29/1995

Number of Days to Update: 24

Source: California Environmental Protection Agency

Telephone: 916-341-5851 Last EDR Contact: 12/28/1998 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 05/28/2020 Date Data Arrived at EDR: 05/29/2020 Date Made Active in Reports: 08/12/2020

Number of Days to Update: 75

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 08/25/2020

Next Scheduled EDR Contact: 12/14/2020

Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 07/29/2020 Date Data Arrived at EDR: 08/03/2020 Date Made Active in Reports: 08/25/2020

Number of Days to Update: 22

Source: Environmental Protection Agency

Telephone: 202-564-6023 Last EDR Contact: 08/03/2020

Next Scheduled EDR Contact: 10/12/2020 Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 06/01/2020 Date Data Arrived at EDR: 06/02/2020 Date Made Active in Reports: 08/14/2020

Number of Days to Update: 73

Source: DTSC and SWRCB Telephone: 916-323-3400 Last EDR Contact: 06/02/2020

Next Scheduled EDR Contact: 09/14/2020 Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 02/27/2020 Date Data Arrived at EDR: 03/24/2020 Date Made Active in Reports: 06/18/2020

Number of Days to Update: 86

Source: U.S. Department of Transportation

Telephone: 202-366-4555 Last EDR Contact: 06/23/2020

Next Scheduled EDR Contact: 10/05/2020 Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 03/31/2020 Date Data Arrived at EDR: 04/21/2020 Date Made Active in Reports: 07/09/2020

Number of Days to Update: 79

Source: Office of Emergency Services

Telephone: 916-845-8400 Last EDR Contact: 07/21/2020

Next Scheduled EDR Contact: 11/02/2020 Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/08/2020 Date Data Arrived at EDR: 06/09/2020 Date Made Active in Reports: 08/19/2020

Number of Days to Update: 71

Source: State Water Qualilty Control Board

Telephone: 866-480-1028 Last EDR Contact: 06/09/2020

Next Scheduled EDR Contact: 09/21/2020 Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/08/2020 Date Data Arrived at EDR: 06/09/2020 Date Made Active in Reports: 08/19/2020

Number of Days to Update: 71

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 06/09/2020

Next Scheduled EDR Contact: 09/21/2020 Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012 Date Data Arrived at EDR: 01/03/2013 Date Made Active in Reports: 02/22/2013

Number of Days to Update: 50

Source: FirstSearch Telephone: N/A

Last EDR Contact: 01/03/2013 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/23/2020 Date Data Arrived at EDR: 03/25/2020 Date Made Active in Reports: 05/21/2020

Number of Days to Update: 57

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 06/22/2020

Next Scheduled EDR Contact: 10/05/2020 Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 05/13/2020 Date Data Arrived at EDR: 05/18/2020 Date Made Active in Reports: 08/12/2020

Number of Days to Update: 86

Source: U.S. Army Corps of Engineers

Telephone: 202-528-4285 Last EDR Contact: 08/13/2020

Next Scheduled EDR Contact: 11/30/2020 Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 11/10/2006 Date Made Active in Reports: 01/11/2007

Number of Days to Update: 62

Source: USGS

Telephone: 888-275-8747 Last EDR Contact: 07/09/2020

Next Scheduled EDR Contact: 10/19/2020 Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018 Date Data Arrived at EDR: 04/11/2018 Date Made Active in Reports: 11/06/2019

Number of Days to Update: 574

Source: U.S. Geological Survey Telephone: 888-275-8747 Last EDR Contact: 07/06/2020

Next Scheduled EDR Contact: 10/19/2020

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: 08/05/2020

Next Scheduled EDR Contact: 11/23/2020 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: 03/23/2020 Date Data Arrived at EDR: 03/24/2020 Date Made Active in Reports: 06/18/2020

Number of Days to Update: 86

Source: Environmental Protection Agency

Telephone: 202-566-1917 Last EDR Contact: 06/22/2020

Next Scheduled EDR Contact: 10/05/2020 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: 07/31/2020

Next Scheduled EDR Contact: 11/16/2020 Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017 Date Data Arrived at EDR: 05/08/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 73

Source: Environmental Protection Agency

Telephone: 703-308-4044 Last EDR Contact: 08/06/2020

Next Scheduled EDR Contact: 11/16/2020

Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016 Date Data Arrived at EDR: 06/21/2017 Date Made Active in Reports: 01/05/2018

Number of Days to Update: 198

Source: EPA

Telephone: 202-260-5521 Last EDR Contact: 06/17/2020

Next Scheduled EDR Contact: 09/28/2020 Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2018 Date Data Arrived at EDR: 02/05/2020 Date Made Active in Reports: 04/24/2020

Number of Days to Update: 79

Source: EPA

Telephone: 202-566-0250 Last EDR Contact: 08/14/2020

Next Scheduled EDR Contact: 11/30/2020 Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 03/01/2020 Date Data Arrived at EDR: 04/21/2020 Date Made Active in Reports: 07/15/2020

Number of Days to Update: 85

Source: EPA Telephone: 202-564-4203 Last EDR Contact: 07/21/2020

Next Scheduled EDR Contact: 11/02/2020 Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 07/29/2020 Date Data Arrived at EDR: 08/03/2020 Date Made Active in Reports: 08/25/2020

Number of Days to Update: 22

Source: EPA

Telephone: 703-416-0223 Last EDR Contact: 08/03/2020

Next Scheduled EDR Contact: 09/14/2020 Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 01/31/2020 Date Data Arrived at EDR: 05/13/2020 Date Made Active in Reports: 08/03/2020

Number of Days to Update: 82

Source: Environmental Protection Agency

Telephone: 202-564-8600 Last EDR Contact: 07/15/2020

Next Scheduled EDR Contact: 11/02/2020 Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995 Date Data Arrived at EDR: 07/03/1995 Date Made Active in Reports: 08/07/1995

Number of Days to Update: 35

Source: EPA

Telephone: 202-564-4104 Last EDR Contact: 06/02/2008

Next Scheduled EDR Contact: 09/01/2008 Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 04/27/2020 Date Data Arrived at EDR: 05/06/2020 Date Made Active in Reports: 06/09/2020

Number of Days to Update: 34

Source: EPA

Telephone: 202-564-6023 Last EDR Contact: 08/03/2020

Next Scheduled EDR Contact: 11/16/2020 Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 10/09/2019 Date Data Arrived at EDR: 10/11/2019 Date Made Active in Reports: 12/20/2019

Number of Days to Update: 70

Source: EPA

Telephone: 202-566-0500 Last EDR Contact: 07/13/2020

Next Scheduled EDR Contact: 10/19/2020 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: 06/30/2020

Next Scheduled EDR Contact: 10/19/2020 Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009 Date Data Arrived at EDR: 04/16/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances

Telephone: 202-566-1667 Last EDR Contact: 08/18/2017

Next Scheduled EDR Contact: 12/04/2017 Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009 Date Data Arrived at EDR: 04/16/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 25

Source: EPA

Telephone: 202-566-1667 Last EDR Contact: 08/18/2017

Next Scheduled EDR Contact: 12/04/2017 Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 10/25/2019 Date Data Arrived at EDR: 10/25/2019 Date Made Active in Reports: 01/15/2020

Number of Days to Update: 82

Source: Nuclear Regulatory Commission

Telephone: 301-415-7169 Last EDR Contact: 07/20/2020

Next Scheduled EDR Contact: 11/02/2020 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: 12/31/2018 Date Data Arrived at EDR: 12/04/2019 Date Made Active in Reports: 01/15/2020

Number of Days to Update: 42

Source: Department of Energy Telephone: 202-586-8719 Last EDR Contact: 06/05/2020

Next Scheduled EDR Contact: 09/14/2020 Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017 Date Data Arrived at EDR: 03/05/2019 Date Made Active in Reports: 11/11/2019

Number of Days to Update: 251

Source: Environmental Protection Agency

Telephone: N/A

Last EDR Contact: 06/01/2020

Next Scheduled EDR Contact: 09/14/2020 Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019 Date Data Arrived at EDR: 11/06/2019 Date Made Active in Reports: 02/10/2020

Number of Days to Update: 96

Source: Environmental Protection Agency

Telephone: 202-566-0517 Last EDR Contact: 08/06/2020

Next Scheduled EDR Contact: 11/16/2020

Data Release Frequency: Varies

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019 Date Data Arrived at EDR: 07/01/2019 Date Made Active in Reports: 09/23/2019

Number of Days to Update: 84

Source: Environmental Protection Agency

Telephone: 202-343-9775 Last EDR Contact: 06/24/2020

Next Scheduled EDR Contact: 10/12/2020 Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006 Date Data Arrived at EDR: 03/01/2007 Date Made Active in Reports: 04/10/2007

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 12/17/2007

Next Scheduled EDR Contact: 03/17/2008

Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006 Date Data Arrived at EDR: 03/01/2007 Date Made Active in Reports: 04/10/2007

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 12/17/2008

Next Scheduled EDR Contact: 03/17/2008 Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020 Date Data Arrived at EDR: 01/28/2020 Date Made Active in Reports: 04/17/2020

Number of Days to Update: 80

Source: Department of Transporation, Office of Pipeline Safety

Telephone: 202-366-4595 Last EDR Contact: 07/27/2020

Next Scheduled EDR Contact: 11/09/2020 Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/30/2020 Date Data Arrived at EDR: 07/15/2020 Date Made Active in Reports: 07/21/2020

Number of Days to Update: 6

Source: Department of Justice, Consent Decree Library

Telephone: Varies

Last EDR Contact: 07/06/2020

Next Scheduled EDR Contact: 10/19/2020

Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015 Date Data Arrived at EDR: 02/22/2017 Date Made Active in Reports: 09/28/2017

Number of Days to Update: 218

Source: EPA/NTIS Telephone: 800-424-9346 Last EDR Contact: 06/22/2020

Next Scheduled EDR Contact: 10/05/2020 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: 07/07/2020

Next Scheduled EDR Contact: 10/19/2020 Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017 Date Data Arrived at EDR: 09/11/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 3

Source: Department of Energy Telephone: 202-586-3559 Last EDR Contact: 07/28/2020

Next Scheduled EDR Contact: 11/16/2020 Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019 Date Data Arrived at EDR: 11/15/2019 Date Made Active in Reports: 01/28/2020

Number of Days to Update: 74

Source: Department of Energy Telephone: 505-845-0011 Last EDR Contact: 08/21/2020

Next Scheduled EDR Contact: 11/30/2020 Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 07/29/2020 Date Data Arrived at EDR: 08/03/2020 Date Made Active in Reports: 08/25/2020

Number of Days to Update: 22

Source: Environmental Protection Agency

Telephone: 703-603-8787 Last EDR Contact: 08/03/2020

Next Scheduled EDR Contact: 10/12/2020 Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites

may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001 Date Data Arrived at EDR: 10/27/2010 Date Made Active in Reports: 12/02/2010

Number of Days to Update: 36

Source: American Journal of Public Health Telephone: 703-305-6451

Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016 Date Data Arrived at EDR: 10/26/2016 Date Made Active in Reports: 02/03/2017

Number of Days to Update: 100

Source: EPA

Telephone: 202-564-2496 Last EDR Contact: 09/26/2017

Next Scheduled EDR Contact: 01/08/2018 Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data A listing of minor source facilities.

Date of Government Version: 10/12/2016 Date Data Arrived at EDR: 10/26/2016 Date Made Active in Reports: 02/03/2017

Number of Days to Update: 100

Source: EPA

Telephone: 202-564-2496 Last EDR Contact: 09/26/2017

Next Scheduled EDR Contact: 01/08/2018 Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 05/01/2020 Date Data Arrived at EDR: 05/21/2020 Date Made Active in Reports: 08/13/2020

Number of Days to Update: 84

Source: Department of Labor, Mine Safety and Health Administration

Telephone: 303-231-5959 Last EDR Contact: 08/25/2020

Next Scheduled EDR Contact: 12/07/2020 Data Release Frequency: Semi-Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 05/28/2020 Date Data Arrived at EDR: 05/28/2020 Date Made Active in Reports: 08/13/2020

Number of Days to Update: 77

Source: DOL, Mine Safety & Health Admi

Telephone: 202-693-9424 Last EDR Contact: 08/26/2020

Next Scheduled EDR Contact: 12/14/2020 Data Release Frequency: Quarterly

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 05/06/2020 Date Data Arrived at EDR: 05/27/2020 Date Made Active in Reports: 08/13/2020

Number of Days to Update: 78

Source: USGS

Telephone: 703-648-7709 Last EDR Contact: 08/28/2020

Next Scheduled EDR Contact: 12/07/2020 Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011 Date Data Arrived at EDR: 06/08/2011 Date Made Active in Reports: 09/13/2011

Number of Days to Update: 97

Source: USGS

Telephone: 703-648-7709 Last EDR Contact: 08/28/2020

Next Scheduled EDR Contact: 12/07/2020 Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 03/05/2020 Date Data Arrived at EDR: 03/06/2020 Date Made Active in Reports: 05/29/2020

Number of Days to Update: 84

Source: Department of Interior Telephone: 202-208-2609 Last EDR Contact: 06/19/2020

Next Scheduled EDR Contact: 09/21/2020 Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 02/03/2020 Date Data Arrived at EDR: 03/03/2020 Date Made Active in Reports: 05/28/2020

Number of Days to Update: 86

Source: EPA

Telephone: (415) 947-8000 Last EDR Contact: 08/26/2020

Next Scheduled EDR Contact: 12/14/2020 Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2017 Date Data Arrived at EDR: 01/17/2019 Date Made Active in Reports: 04/01/2019

Number of Days to Update: 74

Source: Department of Defense Telephone: 703-704-1564 Last EDR Contact: 07/09/2020

Next Scheduled EDR Contact: 10/26/2020

Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 04/04/2020 Date Data Arrived at EDR: 04/07/2020 Date Made Active in Reports: 06/26/2020

Number of Days to Update: 80

Source: Environmental Protection Agency

Telephone: 202-564-2280 Last EDR Contact: 07/02/2020

Next Scheduled EDR Contact: 10/19/2020 Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/31/2018 Date Data Arrived at EDR: 07/26/2018 Date Made Active in Reports: 10/05/2018

Number of Days to Update: 71

Source: Environmental Protection Agency

Telephone: 202-564-0527 Last EDR Contact: 08/19/2020

Next Scheduled EDR Contact: 12/07/2020 Data Release Frequency: Varies

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: 05/18/2020 Date Data Arrived at EDR: 05/19/2020 Date Made Active in Reports: 08/03/2020

Number of Days to Update: 76

Source: EPA

Telephone: 800-385-6164 Last EDR Contact: 08/17/2020

Next Scheduled EDR Contact: 11/30/2020 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: 03/23/2020 Date Data Arrived at EDR: 03/24/2020 Date Made Active in Reports: 06/05/2020

Number of Days to Update: 73

Source: CAL EPA/Office of Emergency Information

Telephone: 916-323-3400 Last EDR Contact: 06/22/2020

Next Scheduled EDR Contact: 10/05/2020 Data Release Frequency: Quarterly

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 05/04/2020 Date Data Arrived at EDR: 05/06/2020 Date Made Active in Reports: 07/17/2020

Number of Days to Update: 72

Source: San Francisco County Department of Environmental Health

Telephone: 415-252-3896 Last EDR Contact: 07/28/2020

Next Scheduled EDR Contact: 11/16/2020 Data Release Frequency: Varies

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing

list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 05/01/2019 Date Data Arrived at EDR: 05/14/2019 Date Made Active in Reports: 07/17/2019

Number of Days to Update: 64

Source: Livermore-Pleasanton Fire Department

Telephone: 925-454-2361 Last EDR Contact: 08/14/2020

Next Scheduled EDR Contact: 11/23/2020 Data Release Frequency: Varies

KERN CO CUPA: Hazardous Material Business Plan

A listing of sites included in the Kern County Hazardous Material Business Plan.

Date of Government Version: 04/29/2020 Date Data Arrived at EDR: 05/05/2020 Date Made Active in Reports: 08/26/2020

Number of Days to Update: 113

Source: Kern County Public Health Telephone: 661-321-3000 Last EDR Contact: 07/28/2020

Next Scheduled EDR Contact: 11/16/2020

Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 06/04/2020 Date Data Arrived at EDR: 06/05/2020 Date Made Active in Reports: 08/17/2020

Number of Days to Update: 73

Source: Department of Toxic Substance Control

Telephone: 916-327-4498 Last EDR Contact: 08/24/2020

Next Scheduled EDR Contact: 12/14/2020 Data Release Frequency: Annually

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing

A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 05/28/2020 Date Data Arrived at EDR: 05/29/2020 Date Made Active in Reports: 08/12/2020

Number of Days to Update: 75

Source: Antelope Valley Air Quality Management District

Telephone: 661-723-8070 Last EDR Contact: 08/25/2020

Next Scheduled EDR Contact: 12/14/2020 Data Release Frequency: Varies

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing

A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 03/25/2020 Date Data Arrived at EDR: 03/26/2020 Date Made Active in Reports: 06/15/2020

Number of Days to Update: 81

Source: South Coast Air Quality Management District

Telephone: 909-396-3211 Last EDR Contact: 08/17/2020

Next Scheduled EDR Contact: 12/07/2020 Data Release Frequency: Varies

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2018 Date Data Arrived at EDR: 06/16/2020 Date Made Active in Reports: 08/28/2020

Number of Days to Update: 73

Source: California Air Resources Board

Telephone: 916-322-2990 Last EDR Contact: 06/16/2020

Next Scheduled EDR Contact: 09/28/2020

Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 04/03/2020 Date Data Arrived at EDR: 04/07/2020 Date Made Active in Reports: 04/15/2020

Number of Days to Update: 8

Source: State Water Resoruces Control Board

Telephone: 916-445-9379 Last EDR Contact: 07/21/2020

Next Scheduled EDR Contact: 11/02/2020 Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 04/09/2020 Date Data Arrived at EDR: 04/10/2020 Date Made Active in Reports: 07/01/2020

Number of Days to Update: 82

Source: Department of Toxic Substances Control

Telephone: 916-255-3628 Last EDR Contact: 07/14/2020

Next Scheduled EDR Contact: 11/02/2020 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: 05/14/2020 Date Data Arrived at EDR: 05/15/2020 Date Made Active in Reports: 07/27/2020

Number of Days to Update: 73

Source: California Integrated Waste Management Board

Telephone: 916-341-6066 Last EDR Contact: 08/04/2020

Next Scheduled EDR Contact: 11/23/2020 Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2019 Date Data Arrived at EDR: 04/15/2020 Date Made Active in Reports: 07/02/2020

Number of Days to Update: 78

Source: California Environmental Protection Agency

Telephone: 916-255-1136 Last EDR Contact: 07/06/2020

Next Scheduled EDR Contact: 10/19/2020 Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 05/18/2020 Date Data Arrived at EDR: 05/19/2020 Date Made Active in Reports: 07/31/2020

Number of Days to Update: 73

Source: Department of Toxic Subsances Control

Telephone: 877-786-9427 Last EDR Contact: 08/17/2020

Next Scheduled EDR Contact: 11/30/2020 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: 05/18/2020 Date Data Arrived at EDR: 05/18/2020 Date Made Active in Reports: 07/31/2020

Number of Days to Update: 74

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 08/17/2020

Next Scheduled EDR Contact: 11/30/2020 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: 04/06/2020 Date Data Arrived at EDR: 04/08/2020 Date Made Active in Reports: 06/26/2020

Number of Days to Update: 79

Source: Department of Toxic Substances Control

Telephone: 916-440-7145 Last EDR Contact: 07/07/2020

Next Scheduled EDR Contact: 10/19/2020 Data Release Frequency: Quarterly

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 06/08/2020 Date Data Arrived at EDR: 06/09/2020 Date Made Active in Reports: 08/19/2020

Number of Days to Update: 71

Source: Department of Conservation

Telephone: 916-322-1080 Last EDR Contact: 06/09/2020

Next Scheduled EDR Contact: 09/21/2020 Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 05/28/2020 Date Data Arrived at EDR: 06/02/2020 Date Made Active in Reports: 08/14/2020

Number of Days to Update: 73

Source: Department of Public Health Telephone: 916-558-1784

Last EDR Contact: 06/02/2020 Next Scheduled EDR Contact: 09/14/2020

Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 05/12/2020 Date Data Arrived at EDR: 05/12/2020 Date Made Active in Reports: 07/28/2020

Number of Days to Update: 77

Source: State Water Resources Control Board

Telephone: 916-445-9379 Last EDR Contact: 08/10/2020

Next Scheduled EDR Contact: 11/23/2020 Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 06/01/2020 Date Data Arrived at EDR: 06/02/2020 Date Made Active in Reports: 08/14/2020

Number of Days to Update: 73

Source: Department of Pesticide Regulation

Telephone: 916-445-4038 Last EDR Contact: 06/02/2020

Next Scheduled EDR Contact: 09/14/2020 Data Release Frequency: Quarterly

PROC: Certified Processors Database A listing of certified processors.

> Date of Government Version: 06/08/2020 Date Data Arrived at EDR: 06/09/2020 Date Made Active in Reports: 08/19/2020

Number of Days to Update: 71

Source: Department of Conservation

Telephone: 916-323-3836 Last EDR Contact: 06/09/2020

Next Scheduled EDR Contact: 09/21/2020 Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 08/21/2020 Date Data Arrived at EDR: 08/21/2020 Date Made Active in Reports: 08/27/2020

Number of Days to Update: 6

Source: State Water Resources Control Board

Telephone: 916-445-3846 Last EDR Contact: 08/20/2020

Next Scheduled EDR Contact: 09/28/2020 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: 06/06/2020 Date Data Arrived at EDR: 06/09/2020 Date Made Active in Reports: 08/20/2020

Number of Days to Update: 72

Source: Deaprtment of Conservation Telephone: 916-445-2408 Last EDR Contact: 06/09/2020

Next Scheduled EDR Contact: 09/21/2020

Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)

Underground control injection sites

Date of Government Version: 06/08/2020 Date Data Arrived at EDR: 06/09/2020 Date Made Active in Reports: 08/19/2020

Number of Days to Update: 71

Source: State Water Resource Control Board

Telephone: 866-480-1028 Last EDR Contact: 06/09/2020

Next Scheduled EDR Contact: 09/21/2020

Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing

Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 11/19/2019 Date Data Arrived at EDR: 01/07/2020 Date Made Active in Reports: 03/09/2020

Number of Days to Update: 62

Source: RWQCB, Central Valley Region

Telephone: 559-445-5577 Last EDR Contact: 07/09/2020

Next Scheduled EDR Contact: 10/19/2020

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: 08/11/2020

Next Scheduled EDR Contact: 11/30/2020 Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009 Date Data Arrived at EDR: 07/21/2009 Date Made Active in Reports: 08/03/2009

Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board

Telephone: 213-576-6726 Last EDR Contact: 06/17/2020

Next Scheduled EDR Contact: 10/05/2020 Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)

Military privatized sites

Date of Government Version: 06/08/2020 Date Data Arrived at EDR: 06/09/2020 Date Made Active in Reports: 08/19/2020

Number of Days to Update: 71

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 06/09/2020

Next Scheduled EDR Contact: 09/21/2020

Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)

Projects sites

Date of Government Version: 06/08/2020 Date Data Arrived at EDR: 06/09/2020 Date Made Active in Reports: 08/19/2020

Number of Days to Update: 71

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 06/09/2020

Next Scheduled EDR Contact: 09/21/2020

Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing

In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert,

pursuant to section 20230 of Title 27.

Date of Government Version: 06/08/2020 Date Data Arrived at EDR: 06/09/2020 Date Made Active in Reports: 08/20/2020

Number of Days to Update: 72

Source: State Water Resources Control Board

Telephone: 916-341-5810

Last EDR Contact: 06/09/2020

Next Scheduled EDR Contact: 09/21/2020 Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 06/01/2020 Date Data Arrived at EDR: 06/02/2020

Date Made Active in Reports: 08/14/2020

Number of Days to Update: 73

Source: State Water Resources Control Board

Telephone: 866-794-4977 Last EDR Contact: 06/02/2020

Next Scheduled EDR Contact: 09/14/2020

Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 04/20/2020 Date Data Arrived at EDR: 04/21/2020

Date Made Active in Reports: 07/13/2020 Number of Days to Update: 83 Source: California Environmental Protection Agency

Telephone: 916-323-2514 Last EDR Contact: 07/21/2020

Next Scheduled EDR Contact: 11/02/2020 Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 06/08/2020 Date Data Arrived at EDR: 06/09/2020 Date Made Active in Reports: 08/19/2020

Number of Days to Update: 71

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 06/09/2020

Next Scheduled EDR Contact: 09/21/2020

Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 06/08/2020 Date Data Arrived at EDR: 06/09/2020 Date Made Active in Reports: 08/19/2020

Number of Days to Update: 71

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 06/09/2020

Next Scheduled EDR Contact: 09/21/2020 Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)

Produced water ponds sites

Date of Government Version: 06/08/2020 Date Data Arrived at EDR: 06/09/2020 Date Made Active in Reports: 08/19/2020

Number of Days to Update: 71

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 06/09/2020

Next Scheduled EDR Contact: 09/21/2020

Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)

Sampling point - public sites

Date of Government Version: 06/08/2020 Date Data Arrived at EDR: 06/09/2020 Date Made Active in Reports: 08/19/2020

Number of Days to Update: 71

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 06/09/2020

Next Scheduled EDR Contact: 09/21/2020

Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)

Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 06/08/2020 Date Data Arrived at EDR: 06/09/2020 Date Made Active in Reports: 08/19/2020

Number of Days to Update: 71

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 06/09/2020

Next Scheduled EDR Contact: 09/21/2020

Data Release Frequency: Varies

MINES MRDS: Mineral Resources Data System

Mineral Resources Data System

Date of Government Version: 04/06/2018 Date Data Arrived at EDR: 10/21/2019 Date Made Active in Reports: 10/24/2019

Number of Days to Update: 3

Source: USGS

Telephone: 703-648-6533 Last EDR Contact: 08/28/2020

Next Scheduled EDR Contact: 12/07/2020 Data Release Frequency: Varies

HWTS: Hazardous Waste Tracking System

DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.

Date of Government Version: 04/08/2020 Date Data Arrived at EDR: 04/09/2020 Date Made Active in Reports: 07/01/2020

Number of Days to Update: 83

Source: Department of Toxic Substances Control

Telephone: 916-324-2444 Last EDR Contact: 08/02/2020

Next Scheduled EDR Contact: 10/18/2020 Data Release Frequency: Varies

PCS INACTIVE: Listing of Inactive PCS Permits

An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014 Date Data Arrived at EDR: 01/06/2015 Date Made Active in Reports: 05/06/2015

Number of Days to Update: 120

Source: EPA

Telephone: 202-564-2496 Last EDR Contact: 07/09/2020

Next Scheduled EDR Contact: 10/19/2020 Data Release Frequency: Semi-Annually

PCS: Permit Compliance System

PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011 Date Data Arrived at EDR: 08/05/2011 Date Made Active in Reports: 09/29/2011

Number of Days to Update: 55

Source: EPA, Office of Water Telephone: 202-564-2496 Last EDR Contact: 06/08/2020

Next Scheduled EDR Contact: 09/21/2020 Data Release Frequency: Semi-Annually

PCS ENF: Enforcement data

No description is available for this data

Date of Government Version: 12/31/2014 Date Data Arrived at EDR: 02/05/2015 Date Made Active in Reports: 03/06/2015

Number of Days to Update: 29

Source: EPA

Telephone: 202-564-2497 Last EDR Contact: 07/01/2020

Next Scheduled EDR Contact: 10/19/2020

Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A Date Data Arrived at EDR: N/A Date Made Active in Reports: N/A

Number of Days to Update: N/A

Source: EDR, Inc. Telephone: N/A Last EDR Contact: N/A

Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A Date Data Arrived at EDR: N/A Date Made Active in Reports: N/A

Number of Days to Update: N/A

Source: EDR, Inc. Telephone: N/A Last EDR Contact: N/A

Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A Source: EDR, Inc. Date Data Arrived at EDR: N/A Telephone: N/A Date Made Active in Reports: N/A Last EDR Contact: N/A

Next Scheduled EDR Contact: N/A Number of Days to Update: N/A Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A Date Data Arrived at EDR: 07/01/2013 Date Made Active in Reports: 01/13/2014

Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery

Telephone: N/A

Last EDR Contact: 06/01/2012 Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A Date Data Arrived at EDR: 07/01/2013 Date Made Active in Reports: 12/30/2013

Number of Days to Update: 182

Source: State Water Resources Control Board

Telephone: N/A

Last EDR Contact: 06/01/2012 Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019 Date Data Arrived at EDR: 01/11/2019 Date Made Active in Reports: 03/05/2019

Number of Days to Update: 53

Source: Alameda County Environmental Health Services

Telephone: 510-567-6700 Last EDR Contact: 06/30/2020

Next Scheduled EDR Contact: 10/19/2020 Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 06/30/2020 Date Data Arrived at EDR: 07/01/2020 Date Made Active in Reports: 07/17/2020

Number of Days to Update: 16

Source: Alameda County Environmental Health Services

Telephone: 510-567-6700 Last EDR Contact: 06/30/2020

Next Scheduled EDR Contact: 10/19/2020 Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List

Cupa Facility List

Date of Government Version: 05/18/2020 Date Data Arrived at EDR: 05/19/2020 Date Made Active in Reports: 06/01/2020

Number of Days to Update: 13

Source: Amador County Environmental Health

Telephone: 209-223-6439 Last EDR Contact: 07/28/2020

Next Scheduled EDR Contact: 11/16/2020

Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing

Cupa facility list.

Date of Government Version: 04/21/2017 Date Data Arrived at EDR: 04/25/2017 Date Made Active in Reports: 08/09/2017

Number of Days to Update: 106

Source: Public Health Department Telephone: 530-538-7149 Last EDR Contact: 06/30/2020

Next Scheduled EDR Contact: 10/19/2020 Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing

Cupa Facility Listing

Date of Government Version: 03/27/2020 Date Data Arrived at EDR: 03/31/2020 Date Made Active in Reports: 06/15/2020

Number of Days to Update: 76

Source: Calveras County Environmental Health

Telephone: 209-754-6399 Last EDR Contact: 06/17/2020

Next Scheduled EDR Contact: 10/05/2020 Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List

Cupa facility list.

Date of Government Version: 04/06/2020 Date Data Arrived at EDR: 04/23/2020 Date Made Active in Reports: 07/10/2020

Number of Days to Update: 78

Source: Health & Human Services Telephone: 530-458-0396 Last EDR Contact: 07/28/2020

Next Scheduled EDR Contact: 11/16/2020 Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 04/01/2020 Date Data Arrived at EDR: 04/20/2020 Date Made Active in Reports: 07/06/2020

Number of Days to Update: 77

Source: Contra Costa Health Services Department

Telephone: 925-646-2286 Last EDR Contact: 07/21/2020

Next Scheduled EDR Contact: 11/09/2020 Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List

Cupa Facility list

Date of Government Version: 04/16/2020 Date Data Arrived at EDR: 04/20/2020 Date Made Active in Reports: 07/08/2020

Number of Days to Update: 79

Source: Del Norte County Environmental Health Division

Telephone: 707-465-0426 Last EDR Contact: 08/13/2020

Next Scheduled EDR Contact: 11/09/2020

Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List

CUPA facility list.

Date of Government Version: 05/07/2020 Date Data Arrived at EDR: 05/07/2020 Date Made Active in Reports: 07/23/2020

Number of Days to Update: 77

Source: El Dorado County Environmental Management Department

Telephone: 530-621-6623 Last EDR Contact: 08/13/2020

Next Scheduled EDR Contact: 11/09/2020

Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 01/10/2020 Date Data Arrived at EDR: 03/31/2020 Date Made Active in Reports: 06/15/2020

Number of Days to Update: 76

Source: Dept. of Community Health Telephone: 559-445-3271 Last EDR Contact: 06/30/2020

Next Scheduled EDR Contact: 10/12/2020 Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List

Cupa facility list

Date of Government Version: 01/22/2018 Date Data Arrived at EDR: 01/24/2018 Date Made Active in Reports: 03/14/2018

Number of Days to Update: 49

Source: Glenn County Air Pollution Control District

Telephone: 830-934-6500 Last EDR Contact: 07/14/2020

Next Scheduled EDR Contact: 11/02/2020 Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List

CUPA facility list.

Date of Government Version: 05/19/2020 Date Data Arrived at EDR: 05/20/2020 Date Made Active in Reports: 06/15/2020

Number of Days to Update: 26

Source: Humboldt County Environmental Health

Telephone: N/A

Last EDR Contact: 08/11/2020

Next Scheduled EDR Contact: 11/30/2020 Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List

Cupa facility list.

Date of Government Version: 04/09/2020 Date Data Arrived at EDR: 04/10/2020 Date Made Active in Reports: 07/01/2020

Number of Days to Update: 82

Source: San Diego Border Field Office

Telephone: 760-339-2777 Last EDR Contact: 07/14/2020

Next Scheduled EDR Contact: 11/02/2020

Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List

Cupa facility list.

Date of Government Version: 04/02/2018 Date Data Arrived at EDR: 04/03/2018 Date Made Active in Reports: 06/14/2018

Number of Days to Update: 72

Source: Inyo County Environmental Health Services

Telephone: 760-878-0238 Last EDR Contact: 08/11/2020

Next Scheduled EDR Contact: 11/30/2020

Data Release Frequency: Varies

KERN COUNTY:

UST KERN: Underground Storage Tank Sites & Tank Listing

Kern County Sites and Tanks Listing.

Date of Government Version: 04/29/2020 Date Data Arrived at EDR: 05/05/2020 Date Made Active in Reports: 07/17/2020

Number of Days to Update: 73

Source: Kern County Environment Health Services Department

Telephone: 661-862-8700 Last EDR Contact: 07/28/2020

Next Scheduled EDR Contact: 11/16/2020 Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 05/11/2020 Date Data Arrived at EDR: 05/12/2020 Date Made Active in Reports: 07/27/2020

Number of Days to Update: 76

Source: Kings County Department of Public Health

Telephone: 559-584-1411 Last EDR Contact: 08/21/2020

Next Scheduled EDR Contact: 11/30/2020 Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List

Cupa facility list

Date of Government Version: 04/20/2020 Date Data Arrived at EDR: 04/28/2020 Date Made Active in Reports: 07/14/2020

Number of Days to Update: 77

Source: Lake County Environmental Health

Telephone: 707-263-1164 Last EDR Contact: 07/08/2020

Next Scheduled EDR Contact: 10/26/2020

Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List

Cupa facility list

Date of Government Version: 01/30/2020 Date Data Arrived at EDR: 01/31/2020 Date Made Active in Reports: 04/09/2020

Number of Days to Update: 69

Source: Lassen County Environmental Health

Telephone: 530-251-8528 Last EDR Contact: 08/11/2020

Next Scheduled EDR Contact: 11/02/2020

Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former

Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009 Date Data Arrived at EDR: 03/31/2009 Date Made Active in Reports: 10/23/2009

Number of Days to Update: 206

Source: N/A Telephone: N/A

Last EDR Contact: 06/10/2020

Next Scheduled EDR Contact: 09/28/2020 Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 03/26/2020 Date Data Arrived at EDR: 03/26/2020 Date Made Active in Reports: 06/15/2020

Number of Days to Update: 81

Source: Department of Public Works

Telephone: 626-458-3517 Last EDR Contact: 06/30/2020

Next Scheduled EDR Contact: 10/19/2020 Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities Solid Waste Facilities in Los Angeles County.

> Date of Government Version: 04/13/2020 Date Data Arrived at EDR: 04/14/2020 Date Made Active in Reports: 07/01/2020

Number of Days to Update: 78

Source: La County Department of Public Works

Telephone: 818-458-5185 Last EDR Contact: 07/13/2020

Next Scheduled EDR Contact: 10/26/2020

Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2019 Date Data Arrived at EDR: 01/15/2019 Date Made Active in Reports: 03/07/2019

Number of Days to Update: 51

Source: Engineering & Construction Division

Telephone: 213-473-7869 Last EDR Contact: 07/08/2020

Next Scheduled EDR Contact: 10/26/2020 Data Release Frequency: Varies

LOS ANGELES AST: Active & Inactive AST Inventory

A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019 Date Data Arrived at EDR: 06/25/2019 Date Made Active in Reports: 08/22/2019

Number of Days to Update: 58

Source: Los Angeles Fire Department

Telephone: 213-978-3800 Last EDR Contact: 06/25/2020

Next Scheduled EDR Contact: 10/05/2020

Data Release Frequency: Varies

LOS ANGELES CO LF METHANE: Methane Producing Landfills

This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 04/30/2012 Date Data Arrived at EDR: 04/17/2019 Date Made Active in Reports: 05/29/2019 Number of Days to Update: 42

Telephone: 626-458-6973 Last EDR Contact: 08/11/2020

Next Scheduled EDR Contact: 10/26/2020 Data Release Frequency: No Update Planned

Source: Los Angeles County Department of Public Works

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory

A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019 Date Data Arrived at EDR: 06/25/2019 Date Made Active in Reports: 08/22/2019

Source: Los Angeles Fire Department Telephone: 213-978-3800

Last EDR Contact: 06/25/2020 Next Scheduled EDR Contact: 10/05/2020

Number of Days to Update: 58

Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory

A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 06/01/2019 Date Data Arrived at EDR: 06/25/2019 Date Made Active in Reports: 08/22/2019 Source: Los Angeles Fire Department

Telephone: 213-978-3800 Last EDR Contact: 06/25/2020

Number of Days to Update: 58

Next Scheduled EDR Contact: 10/05/2020 Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 03/25/2020 Date Data Arrived at EDR: 04/14/2020 Date Made Active in Reports: 07/01/2020 Source: Community Health Services Telephone: 323-890-7806

Last EDR Contact: 07/17/2020

Number of Days to Update: 78

Next Scheduled EDR Contact: 10/26/2020 Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017 Date Data Arrived at EDR: 04/19/2017 Date Made Active in Reports: 05/10/2017

Source: City of El Segundo Fire Department

Telephone: 310-524-2236 Last EDR Contact: 07/08/2020

Number of Days to Update: 21

Next Scheduled EDR Contact: 10/26/2020 Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019 Date Data Arrived at EDR: 04/23/2019 Date Made Active in Reports: 06/27/2019

Source: City of Long Beach Fire Department

Telephone: 562-570-2563 Last EDR Contact: 07/14/2020

Number of Days to Update: 65

Next Scheduled EDR Contact: 11/02/2020 Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank Underground storage tank sites located in the city of Torrance.

Date of Government Version: 06/27/2019 Date Data Arrived at EDR: 07/30/2019 Date Made Active in Reports: 10/02/2019

Number of Days to Update: 64

Source: City of Torrance Fire Department

Telephone: 310-618-2973 Last EDR Contact: 07/14/2020

Next Scheduled EDR Contact: 11/02/2020 Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 02/24/2020 Date Data Arrived at EDR: 02/25/2020 Date Made Active in Reports: 05/07/2020

Number of Days to Update: 72

Source: Madera County Environmental Health

Telephone: 559-675-7823 Last EDR Contact: 08/04/2020

Next Scheduled EDR Contact: 11/30/2020 Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites Currently permitted USTs in Marin County.

> Date of Government Version: 09/26/2018 Date Data Arrived at EDR: 10/04/2018 Date Made Active in Reports: 11/02/2018

Number of Days to Update: 29

Source: Public Works Department Waste Management

Telephone: 415-473-6647 Last EDR Contact: 06/24/2020

Next Scheduled EDR Contact: 10/12/2020 Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List CUPA facility list.

> Date of Government Version: 07/28/2020 Date Data Arrived at EDR: 07/30/2020 Date Made Active in Reports: 07/31/2020

Number of Days to Update: 1

Source: Merced County Environmental Health

Telephone: 209-381-1094 Last EDR Contact: 07/24/2020

Next Scheduled EDR Contact: 11/30/2020

Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List **CUPA Facility List**

> Date of Government Version: 05/15/2020 Date Data Arrived at EDR: 06/02/2020 Date Made Active in Reports: 08/14/2020

Number of Days to Update: 73

Source: Mono County Health Department

Telephone: 760-932-5580 Last EDR Contact: 08/19/2020

Next Scheduled EDR Contact: 12/07/2020

Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing

CUPA Program listing from the Environmental Health Division.

Date of Government Version: 07/13/2020 Date Data Arrived at EDR: 07/15/2020 Date Made Active in Reports: 07/31/2020

Number of Days to Update: 16

Source: Monterey County Health Department

Telephone: 831-796-1297 Last EDR Contact: 07/08/2020

Next Scheduled EDR Contact: 10/12/2020 Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination

A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017 Date Data Arrived at EDR: 01/11/2017 Date Made Active in Reports: 03/02/2017

Number of Days to Update: 50

Source: Napa County Department of Environmental Management

Telephone: 707-253-4269 Last EDR Contact: 08/19/2020

Next Scheduled EDR Contact: 12/07/2020 Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites

Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019 Date Data Arrived at EDR: 09/09/2019 Date Made Active in Reports: 10/31/2019

Number of Days to Update: 52

Source: Napa County Department of Environmental Management

Telephone: 707-253-4269 Last EDR Contact: 08/19/2020

Next Scheduled EDR Contact: 12/07/2020 Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List

CUPA facility list.

Date of Government Version: 05/06/2020 Date Data Arrived at EDR: 05/07/2020 Date Made Active in Reports: 07/24/2020

Number of Days to Update: 78

Source: Community Development Agency

Telephone: 530-265-1467 Last EDR Contact: 07/21/2020

Next Scheduled EDR Contact: 11/09/2020 Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups

Petroleum and non-petroleum spills.

Date of Government Version: 05/01/2020 Date Data Arrived at EDR: 05/08/2020 Date Made Active in Reports: 07/24/2020

Number of Days to Update: 77

Source: Health Care Agency Telephone: 714-834-3446 Last EDR Contact: 07/31/2020

Next Scheduled EDR Contact: 11/16/2020 Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 05/01/2020 Date Data Arrived at EDR: 05/08/2020 Date Made Active in Reports: 07/24/2020

Number of Days to Update: 77

Source: Health Care Agency Telephone: 714-834-3446 Last EDR Contact: 07/31/2020

Next Scheduled EDR Contact: 11/16/2020 Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 05/01/2020 Date Data Arrived at EDR: 05/05/2020 Date Made Active in Reports: 07/17/2020

Number of Days to Update: 73

Source: Health Care Agency Telephone: 714-834-3446 Last EDR Contact: 08/03/2020

Next Scheduled EDR Contact: 11/16/2020 Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 06/08/2020 Date Data Arrived at EDR: 06/10/2020 Date Made Active in Reports: 08/24/2020

Number of Days to Update: 75

Source: Placer County Health and Human Services

Telephone: 530-745-2363 Last EDR Contact: 08/25/2020

Next Scheduled EDR Contact: 12/14/2020 Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List

Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019 Date Data Arrived at EDR: 04/23/2019 Date Made Active in Reports: 06/26/2019

Number of Days to Update: 64

Source: Plumas County Environmental Health

Telephone: 530-283-6355 Last EDR Contact: 07/14/2020

Next Scheduled EDR Contact: 11/02/2020

Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites

Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 03/10/2020 Date Data Arrived at EDR: 03/11/2020 Date Made Active in Reports: 05/20/2020

Number of Days to Update: 70

Source: Department of Environmental Health

Telephone: 951-358-5055 Last EDR Contact: 06/10/2020

Next Scheduled EDR Contact: 09/28/2020 Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 03/10/2020 Date Data Arrived at EDR: 03/11/2020 Date Made Active in Reports: 05/20/2020

Number of Days to Update: 70

Source: Department of Environmental Health

Telephone: 951-358-5055 Last EDR Contact: 06/10/2020

Next Scheduled EDR Contact: 09/28/2020 Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List

List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 02/18/2020 Date Data Arrived at EDR: 03/31/2020 Date Made Active in Reports: 06/15/2020

Number of Days to Update: 76

Source: Sacramento County Environmental Management

Telephone: 916-875-8406 Last EDR Contact: 07/02/2020

Next Scheduled EDR Contact: 10/12/2020 Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 02/24/2020 Date Data Arrived at EDR: 03/31/2020 Date Made Active in Reports: 06/17/2020

Number of Days to Update: 78

Source: Sacramento County Environmental Management

Telephone: 916-875-8406 Last EDR Contact: 07/02/2020

Next Scheduled EDR Contact: 10/12/2020 Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List

Cupa facility list

Date of Government Version: 04/24/2020 Date Data Arrived at EDR: 04/28/2020 Date Made Active in Reports: 07/13/2020

Number of Days to Update: 76

Source: San Benito County Environmental Health

Telephone: N/A

Last EDR Contact: 07/28/2020

Next Scheduled EDR Contact: 11/16/2020

Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 02/25/2020 Date Data Arrived at EDR: 02/26/2020 Date Made Active in Reports: 05/07/2020

Number of Days to Update: 71

Source: San Bernardino County Fire Department Hazardous Materials Division

Telephone: 909-387-3041 Last EDR Contact: 07/28/2020

Next Scheduled EDR Contact: 11/16/2020 Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 06/01/2020 Date Data Arrived at EDR: 06/02/2020 Date Made Active in Reports: 08/14/2020

Number of Days to Update: 73

Source: Hazardous Materials Management Division

Telephone: 619-338-2268 Last EDR Contact: 06/02/2020

Next Scheduled EDR Contact: 09/14/2020 Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 04/18/2018 Date Data Arrived at EDR: 04/24/2018 Date Made Active in Reports: 06/19/2018

Number of Days to Update: 56

Source: Department of Health Services

Telephone: 619-338-2209 Last EDR Contact: 07/14/2020

Next Scheduled EDR Contact: 11/02/2020 Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 04/09/2020 Date Data Arrived at EDR: 04/10/2020 Date Made Active in Reports: 06/26/2020

Number of Days to Update: 77

Source: Department of Environmental Health

Telephone: 858-505-6874 Last EDR Contact: 07/14/2020

Next Scheduled EDR Contact: 11/02/2020

Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010 Date Data Arrived at EDR: 06/15/2010 Date Made Active in Reports: 07/09/2010

Number of Days to Update: 24

Source: San Diego County Department of Environmental Health

Telephone: 619-338-2371 Last EDR Contact: 08/25/2020

Next Scheduled EDR Contact: 12/14/2020 Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

LUST SAN FRANCISCO: Local Oversite Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008 Date Data Arrived at EDR: 09/19/2008 Date Made Active in Reports: 09/29/2008

Number of Days to Update: 10

Source: Department Of Public Health San Francisco County

Telephone: 415-252-3920 Last EDR Contact: 07/28/2020

Next Scheduled EDR Contact: 11/16/2020 Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 05/04/2020 Date Data Arrived at EDR: 05/06/2020 Date Made Active in Reports: 07/17/2020

Number of Days to Update: 72

Source: Department of Public Health

Telephone: 415-252-3920 Last EDR Contact: 07/28/2020

Next Scheduled EDR Contact: 11/16/2020 Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018 Date Data Arrived at EDR: 06/26/2018 Date Made Active in Reports: 07/11/2018

Number of Days to Update: 15

Source: Environmental Health Department

Telephone: N/A

Last EDR Contact: 06/10/2020

Next Scheduled EDR Contact: 09/28/2020 Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List

Cupa Facility List.

Date of Government Version: 05/08/2020 Date Data Arrived at EDR: 05/08/2020 Date Made Active in Reports: 08/03/2020

Number of Days to Update: 87

Source: San Luis Obispo County Public Health Department

Telephone: 805-781-5596 Last EDR Contact: 08/11/2020

Next Scheduled EDR Contact: 11/30/2020

Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 02/20/2020 Date Data Arrived at EDR: 02/20/2020 Date Made Active in Reports: 04/24/2020

Number of Days to Update: 64

Telephone: 650-363-1921 Last EDR Contact: 06/12/2020

Next Scheduled EDR Contact: 09/21/2020 Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019 Date Data Arrived at EDR: 03/29/2019 Date Made Active in Reports: 05/29/2019

Number of Days to Update: 61

Source: San Mateo County Environmental Health Services Division

Source: San Mateo County Environmental Health Services Division

Telephone: 650-363-1921 Last EDR Contact: 06/03/2020

Next Scheduled EDR Contact: 09/21/2020 Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing

 $\hbox{CUPA Program Listing from the Environmental Health Services division}.$

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: 08/11/2020

Next Scheduled EDR Contact: 11/30/2020 Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List

Cupa facility list

Date of Government Version: 05/08/2020 Date Data Arrived at EDR: 05/12/2020 Date Made Active in Reports: 07/27/2020

Number of Days to Update: 76

Source: Department of Environmental Health

Telephone: 408-918-1973 Last EDR Contact: 08/11/2020

Next Scheduled EDR Contact: 11/30/2020 Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county.

Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005 Date Data Arrived at EDR: 03/30/2005 Date Made Active in Reports: 04/21/2005

Number of Days to Update: 22

Source: Santa Clara Valley Water District

Telephone: 408-265-2600 Last EDR Contact: 03/23/2009

Next Scheduled EDR Contact: 06/22/2009 Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014 Date Data Arrived at EDR: 03/05/2014 Date Made Active in Reports: 03/18/2014

Number of Days to Update: 13

Source: Department of Environmental Health

Telephone: 408-918-3417 Last EDR Contact: 08/19/2020

Next Scheduled EDR Contact: 12/07/2020 Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 04/22/2020 Date Data Arrived at EDR: 04/24/2020 Date Made Active in Reports: 05/07/2020

Number of Days to Update: 13

Source: City of San Jose Fire Department

Telephone: 408-535-7694 Last EDR Contact: 07/28/2020

Next Scheduled EDR Contact: 11/16/2020 Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List

CUPA facility listing.

Date of Government Version: 01/21/2017 Date Data Arrived at EDR: 02/22/2017 Date Made Active in Reports: 05/23/2017

Number of Days to Update: 90

Source: Santa Cruz County Environmental Health

Telephone: 831-464-2761 Last EDR Contact: 08/11/2020

Next Scheduled EDR Contact: 11/30/2020

Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List

Cupa Facility List.

Date of Government Version: 06/15/2017 Date Data Arrived at EDR: 06/19/2017 Date Made Active in Reports: 08/09/2017

Number of Days to Update: 51

Source: Shasta County Department of Resource Management

Telephone: 530-225-5789 Last EDR Contact: 08/11/2020

Next Scheduled EDR Contact: 11/30/2020

Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019 Date Data Arrived at EDR: 06/06/2019 Date Made Active in Reports: 08/13/2019

Number of Days to Update: 68

Source: Solano County Department of Environmental Management

Telephone: 707-784-6770 Last EDR Contact: 08/25/2020

Next Scheduled EDR Contact: 12/14/2020 Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 03/02/2020 Date Data Arrived at EDR: 03/04/2020 Date Made Active in Reports: 05/14/2020

Number of Days to Update: 71

Source: Solano County Department of Environmental Management

Telephone: 707-784-6770 Last EDR Contact: 08/25/2020

Next Scheduled EDR Contact: 12/14/2020 Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List

Cupa Facility list

Date of Government Version: 02/25/2020 Date Data Arrived at EDR: 02/26/2020 Date Made Active in Reports: 03/11/2020

Number of Days to Update: 14

Source: County of Sonoma Fire & Emergency Services Department

Telephone: 707-565-1174 Last EDR Contact: 06/30/2020

Next Scheduled EDR Contact: 10/05/2020 Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 04/03/2020 Date Data Arrived at EDR: 04/08/2020 Date Made Active in Reports: 06/26/2020

Number of Days to Update: 79

Source: Department of Health Services

Telephone: 707-565-6565 Last EDR Contact: 06/17/2020

Next Scheduled EDR Contact: 10/05/2020 Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List

Cupa facility list

Date of Government Version: 02/04/2020 Date Data Arrived at EDR: 02/05/2020 Date Made Active in Reports: 04/15/2020

Number of Days to Update: 70

Source: Stanislaus County Department of Ennvironmental Protection

Telephone: 209-525-6751 Last EDR Contact: 07/06/2020

Next Scheduled EDR Contact: 10/26/2020

Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 05/26/2020 Date Data Arrived at EDR: 05/28/2020 Date Made Active in Reports: 08/13/2020

Number of Days to Update: 77

Source: Sutter County Environmental Health Services

Telephone: 530-822-7500 Last EDR Contact: 08/25/2020

Next Scheduled EDR Contact: 12/14/2020 Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List

Cupa facilities

Date of Government Version: 05/18/2020 Date Data Arrived at EDR: 05/19/2020 Date Made Active in Reports: 07/31/2020

Number of Days to Update: 73

Source: Tehama County Department of Environmental Health

Telephone: 530-527-8020 Last EDR Contact: 08/11/2020

Next Scheduled EDR Contact: 11/16/2020 Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List

Cupa facility list

Date of Government Version: 04/09/2020 Date Data Arrived at EDR: 04/10/2020 Date Made Active in Reports: 07/01/2020

Number of Days to Update: 82

Source: Department of Toxic Substances Control

Telephone: 760-352-0381 Last EDR Contact: 07/14/2020

Next Scheduled EDR Contact: 11/02/2020

Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List Cupa program facilities

Date of Government Version: 05/14/2020 Date Data Arrived at EDR: 05/15/2020 Date Made Active in Reports: 07/27/2020

Number of Days to Update: 73

Source: Tulare County Environmental Health Services Division

Telephone: 559-624-7400 Last EDR Contact: 08/06/2020

Last EDR Contact: 08/06/2020

Next Scheduled EDR Contact: 11/16/2020

Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List

Cupa facility list

Date of Government Version: 04/23/2018 Date Data Arrived at EDR: 04/25/2018 Date Made Active in Reports: 06/25/2018

Number of Days to Update: 61

Source: Divison of Environmental Health

Telephone: 209-533-5633 Last EDR Contact: 07/14/2020

Next Scheduled EDR Contact: 11/02/2020

Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste

Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 03/26/2020 Date Data Arrived at EDR: 04/23/2020 Date Made Active in Reports: 07/09/2020

Number of Days to Update: 77

Source: Ventura County Environmental Health Division

Telephone: 805-654-2813 Last EDR Contact: 07/20/2020

Next Scheduled EDR Contact: 11/02/2020 Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011 Date Data Arrived at EDR: 12/01/2011 Date Made Active in Reports: 01/19/2012

Number of Days to Update: 49

Source: Environmental Health Division

Telephone: 805-654-2813 Last EDR Contact: 06/24/2020

Next Scheduled EDR Contact: 10/12/2020 Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008 Date Data Arrived at EDR: 06/24/2008 Date Made Active in Reports: 07/31/2008

Number of Days to Update: 37

Source: Environmental Health Division

Telephone: 805-654-2813 Last EDR Contact: 08/04/2020

Next Scheduled EDR Contact: 11/23/2020 Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 03/26/2020 Date Data Arrived at EDR: 04/23/2020 Date Made Active in Reports: 07/09/2020

Number of Days to Update: 77

Source: Ventura County Resource Management Agency

Telephone: 805-654-2813 Last EDR Contact: 07/20/2020

Next Scheduled EDR Contact: 11/02/2020 Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 05/26/2020 Date Data Arrived at EDR: 06/09/2020 Date Made Active in Reports: 08/20/2020

Number of Days to Update: 72

Source: Environmental Health Division

Telephone: 805-654-2813 Last EDR Contact: 06/09/2020

Next Scheduled EDR Contact: 09/21/2020 Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report Underground storage tank sites located in Yolo county.

Date of Government Version: 03/23/2020 Date Data Arrived at EDR: 04/01/2020 Date Made Active in Reports: 06/17/2020

Number of Days to Update: 77

Source: Yolo County Department of Health

Telephone: 530-666-8646 Last EDR Contact: 06/24/2020

Next Scheduled EDR Contact: 10/12/2020 Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List

CUPA facility listing for Yuba County.

Date of Government Version: 04/27/2020 Date Data Arrived at EDR: 04/29/2020 Date Made Active in Reports: 07/17/2020

Number of Days to Update: 79

Source: Yuba County Environmental Health Department

Telephone: 530-749-7523 Last EDR Contact: 08/04/2020

Next Scheduled EDR Contact: 11/09/2020

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: 05/12/2020 Date Data Arrived at EDR: 05/12/2020 Date Made Active in Reports: 07/27/2020

Number of Days to Update: 76

Source: Department of Energy & Environmental Protection

Telephone: 860-424-3375 Last EDR Contact: 08/10/2020

Next Scheduled EDR Contact: 11/23/2020 Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2018 Date Data Arrived at EDR: 04/10/2019 Date Made Active in Reports: 05/16/2019

Number of Days to Update: 36

Source: Department of Environmental Protection

Telephone: N/A

Last EDR Contact: 07/09/2020

Next Scheduled EDR Contact: 10/19/2020 Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD

facility.

Date of Government Version: 01/01/2019 Date Data Arrived at EDR: 04/29/2020 Date Made Active in Reports: 07/10/2020

Number of Days to Update: 72

Source: Department of Environmental Conservation

Telephone: 518-402-8651 Last EDR Contact: 07/31/2020

Next Scheduled EDR Contact: 11/09/2020 Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 06/30/2018 Date Data Arrived at EDR: 07/19/2019 Date Made Active in Reports: 09/10/2019

Number of Days to Update: 53

Source: Department of Environmental Protection

Telephone: 717-783-8990 Last EDR Contact: 07/09/2020

Next Scheduled EDR Contact: 10/26/2020 Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2018 Date Data Arrived at EDR: 10/02/2019 Date Made Active in Reports: 12/10/2019

Number of Days to Update: 69

Source: Department of Environmental Management

Telephone: 401-222-2797 Last EDR Contact: 08/11/2020

Next Scheduled EDR Contact: 11/30/2020 Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 05/31/2018 Date Data Arrived at EDR: 06/19/2019 Date Made Active in Reports: 09/03/2019

Number of Days to Update: 76

Source: Department of Natural Resources

Telephone: N/A

Last EDR Contact: 06/04/2020

Next Scheduled EDR Contact: 09/21/2020 Data Release Frequency: Annually

Oil/Gas Pipelines

Source: Endeavor Business Media

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data

Source: Endeavor Business Media

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services,

a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary

and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities Source: Department of Social Services

Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory

Source: Department of Fish and Wildlife

Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK®-PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

HELENDALE CSD WELL FIELD 20675 HELENDALE ROAD HELENDALE, CA 92342

TARGET PROPERTY COORDINATES

Latitude (North): 34.723909 - 34° 43' 26.07" Longitude (West): 117.345905 - 117° 20' 45.26"

Universal Tranverse Mercator: Zone 11 UTM X (Meters): 468329.2 UTM Y (Meters): 3842284.0

Elevation: 2481 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map: 5619060 HELENDALE, CA

Version Date: 2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

- 1. Groundwater flow direction, and
- 2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

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).

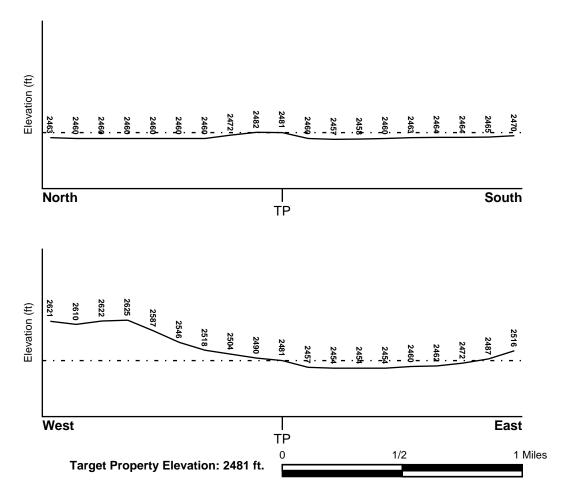
TOPOGRAPHIC INFORMATION

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 ESE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

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

06071C5150H FEMA FIRM Flood data

Additional Panels in search area: FEMA Source Type

Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property Data Coverage

NOT AVAILABLE 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.

LOCATION GENERAL DIRECTION

MAP ID FROM TP GROUNDWATER FLOW

Not Reported

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

GEOLOGIC AGE IDENTIFICATION

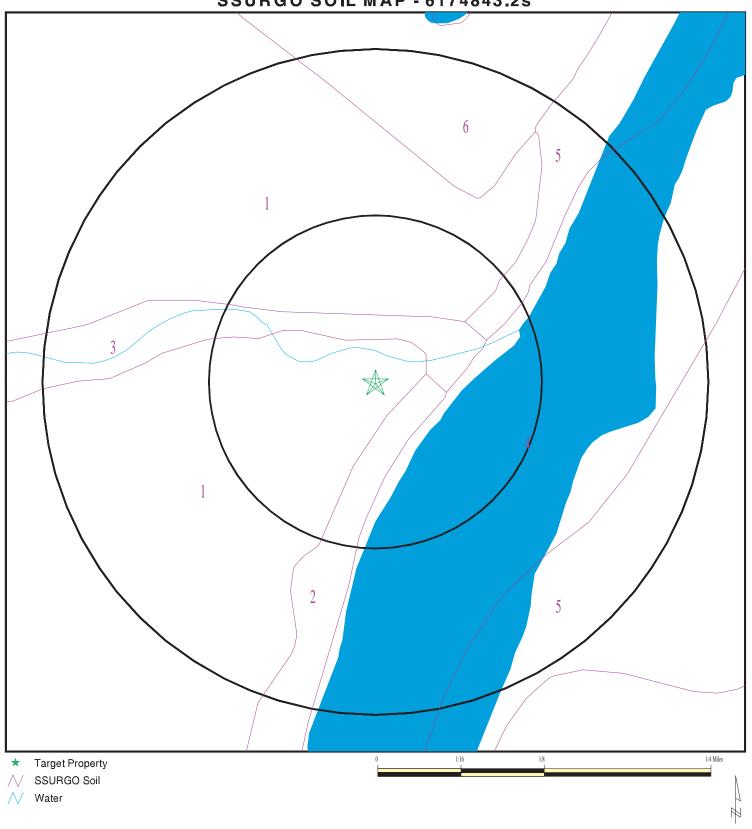
Era: Cenozoic Category: Stratifed Sequence

System: Quaternary Series: Quaternary

Code: Q (decoded above as Era, System & Series)

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 - 6174843.2s



SITE NAME: Helendale CSD Well Field ADDRESS: 20675 Helendale Road

Helendale CA 92342 34.723909 / 117.345905 LAT/LONG:

CLIENT: BCA Engineering Corp CONTACT: Randy Coleman INQUIRY #: 6174843.2s

DATE: August 31, 2020 3:06 pm

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: CAJON

Soil Surface Texture:

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to

excessively drained sands and gravels.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Layer	Boundary		Classification	fication	Saturated hydraulic		
	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	
1	0 inches	7 inches		Not reported	Not reported	Max: 14 Min: 4	Max: 8.4 Min: 7.4
2	7 inches	20 inches		Not reported	Not reported	Max: 14 Min: 4	Max: 8.4 Min: 7.4
3	20 inches	42 inches		Not reported	Not reported	Max: 14 Min: 4	Max: 8.4 Min: 7.4
4	42 inches	59 inches		Not reported	Not reported	Max: 14 Min: 4	Max: 8.4 Min: 7.4

Soil Map ID: 2

Soil Component Name: BADLAND

Soil Surface Texture:

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to

excessively drained sands and gravels.

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	ication	Saturated hydraulic			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		Soil Reaction (pH)		
1	0 inches	59 inches		Not reported	Not reported	Max: Min:	Max: Min:		

Soil Map ID: 3

Soil Component Name: Cajon Soil Surface Texture: sand

Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels. Hydrologic Group:

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

> 0 inches Depth to Bedrock Min:

Depth to Watertable Min: > 0 inches

Soil Layer Information									
	Boundary			Classification	Saturated hydraulic				
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		Soil Reaction (pH)		
1	0 inches	5 inches	sand	Granular materials (35 pct. or less passing No. 200), Fine Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 8.4 Min: 7.4		

Soil Layer Information								
Layer	Boundary			Classification		Saturated hydraulic		
	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	Soil Reaction (pH)	
2	5 inches	25 inches	sand	Granular materials (35 pct. or less passing No. 200), Fine Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 8.4 Min: 7.4	
3	25 inches	59 inches	stratified gravelly sand to sand	Granular materials (35 pct. or less passing No. 200), Fine Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 8.4 Min: 7.4	

Soil Map ID: 4

Soil Component Name: **RIVERWASH**

Soil Surface Texture: Hydrologic Group:

Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Hydric Status: All hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches Depth to Watertable Min: > 0 inches

Soil Layer Information									
Boundary				Classification	ication	Saturated hydraulic			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		Soil Reaction (pH)		
1	0 inches	59 inches		Not reported	Not reported	Max: Min:	Max: Min:		

Soil Map ID: 5

Soil Component Name: VILLA

Soil Surface Texture:

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep,

moderately well and well drained soils with moderately coarse

textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 137 inches

Soil Layer Information									
	Boui	ndary		Classification		Saturated hydraulic			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	Soil Reaction (pH)		
1	0 inches	7 inches		Not reported	Not reported	Max: 42 Min: 14	Max: 8.4 Min: 7.4		
2	7 inches	59 inches		Not reported	Not reported	Max: 42 Min: 14	Max: 8.4 Min: 7.4		

Soil Map ID: 6

Soil Component Name: TORRIORTHENTS

Soil Surface Texture:

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep,

moderately well and well drained soils with moderately coarse

textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE SEARCH DISTANCE (miles)

Federal USGS 1.000

Federal FRDS PWS Nearest PWS within 1 mile

State Database 1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
	USGS40000152673	0 - 1/8 Mile East
A4	USGS40000152673	0 - 1/8 Mile ESE
A5	USGS40000152646	0 - 1/8 Mile SE
B6	USGS40000152695	0 - 1/8 Mile NNE
C7	USGS40000152602	1/8 - 1/4 Mile SSW
D13	USGS40000152672	1/8 - 1/4 Mile East
E14	USGS40000152715	1/8 - 1/4 Mile NE
D15	USGS40000152671	1/4 - 1/2 Mile East
D18	USGS40000152670	1/4 - 1/2 Mile East
E20	USGS40000152714	1/4 - 1/2 Mile ENE
F21	USGS40000152669	1/4 - 1/2 Mile East
F22	USGS40000152659	1/4 - 1/2 Mile East
G23	USGS40000152713	1/4 - 1/2 Mile ENE
25	USGS40000152574	1/4 - 1/2 Mile SW
F27	USGS40000152658	1/4 - 1/2 Mile East
H28	USGS40000152582	1/4 - 1/2 Mile SE
30	USGS40000152783	1/4 - 1/2 Mile NE
H31	USGS40000152568	1/4 - 1/2 Mile SE
32	USGS40000152700	1/4 - 1/2 Mile ENE
33	USGS40000152619	1/4 - 1/2 Mile ESE
J38	USGS40000152889	1/4 - 1/2 Mile North
J39	USGS40000152890	1/4 - 1/2 Mile North
140	USGS40000152741	1/4 - 1/2 Mile ENE
J41	USGS40000152888	1/4 - 1/2 Mile North
K44	USGS40000152740	1/2 - 1 Mile ENE
K46	USGS40000152765	1/2 - 1 Mile ENE
K47	USGS40000152764	1/2 - 1 Mile ENE
K49	USGS40000152748	1/2 - 1 Mile ENE
50	USGS40000152887	1/2 - 1 Mile NNE
M52	USGS40000152407	1/2 - 1 Mile SSE
K53	USGS40000152782	1/2 - 1 Mile ENE
L54	USGS40000152567	1/2 - 1 Mile ESE
55	USGS40000152566	1/2 - 1 Mile ESE
N58	USGS40000152668	1/2 - 1 Mile East
O63	USGS40000152406	1/2 - 1 Mile SE
O64	USGS40000152397	1/2 - 1 Mile SE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
O66	USGS40000152386	1/2 - 1 Mile SE
P69	USGS40000152504	1/2 - 1 Mile ESE
Q70	USGS40000152667	1/2 - 1 Mile East
P71	USGS40000152503	1/2 - 1 Mile ESE
72	USGS40000153020	1/2 - 1 Mile North
R73	USGS40000152502	1/2 - 1 Mile ESE
S74	USGS40000152732	1/2 - 1 Mile ENE
75	USGS40000152796	1/2 - 1 Mile ENE
R76	USGS40000152501	1/2 - 1 Mile ESE
Q77	USGS40000152657	1/2 - 1 Mile East
R79	USGS40000152529	1/2 - 1 Mile ESE
S80	USGS40000152781	1/2 - 1 Mile ENE
81	USGS40000152565	1/2 - 1 Mile ESE
R82	USGS40000152500	1/2 - 1 Mile ESE
86	USGS40000152886	1/2 - 1 Mile ENE
87	USGS40000152405	1/2 - 1 Mile ESE
T88	USGS40000152327	1/2 - 1 Mile SSE
T89	USGS40000152328	1/2 - 1 Mile SSE

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

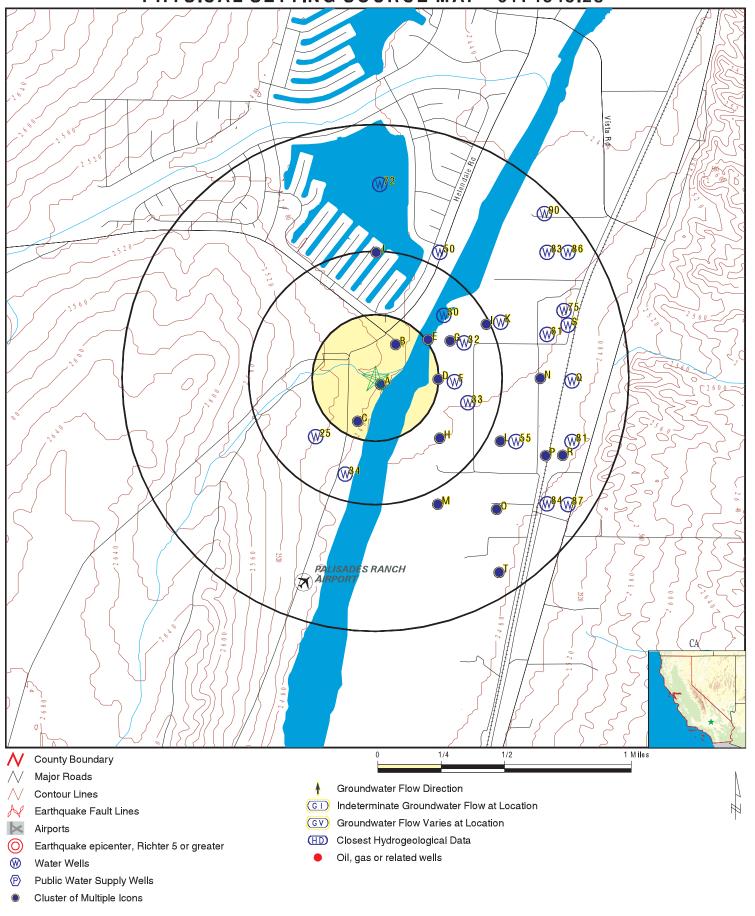
MAP ID	WELL ID	LOCATION FROM TP
	CADWR8000012083	0 - 1/8 Mile SSW
A3	CADWR8000012076	0 - 1/8 Mile South
B8	CADWR8000012113	1/8 - 1/4 Mile NE
C9	CADWR8000012062	1/8 - 1/4 Mile SSW
D10	CADWR8000012088	1/8 - 1/4 Mile East
D11	CADWR8000012087	1/8 - 1/4 Mile East
E12	CADWR8000012112	1/8 - 1/4 Mile NE
E16	CADWR8000012110	1/4 - 1/2 Mile NE
E17	CADWR8000012111	1/4 - 1/2 Mile NE
D19	CADWR8000012082	1/4 - 1/2 Mile East
G24	CADWR8000012109	1/4 - 1/2 Mile ENE
H26	CADWR8000012052	1/4 - 1/2 Mile SE
G29	CADWR8000012105	1/4 - 1/2 Mile ENE
34	CADWR8000012054	1/4 - 1/2 Mile SSW
135	CADWR8000012140	1/4 - 1/2 Mile ENE
136	CADWR8000012131	1/4 - 1/2 Mile ENE
J37	CADWR8000012190	1/4 - 1/2 Mile North
J42	CADWR8000012191	1/4 - 1/2 Mile North
143	CADWR8000012139	1/2 - 1 Mile ENE

GEOCHECK[®] - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
L45	CADWR8000012051	1/2 - 1 Mile ESE
M48	CADWR8000011975	1/2 - 1 Mile SSE
L51	CADWR8000012050	1/2 - 1 Mile ESE
N56	CADWR8000012086	1/2 - 1 Mile East
O57	CADWR8000011974	1/2 - 1 Mile SE
O59	CADWR8000011970	1/2 - 1 Mile SE
P60	CADWR8000012023	1/2 - 1 Mile ESE
61	CADWR8000012121	1/2 - 1 Mile ENE
O62	CADWR8000011963	1/2 - 1 Mile SE
P65	CADWR8000012034	1/2 - 1 Mile ESE
P67	CADWR8000012021	1/2 - 1 Mile ESE
P68	CADWR8000012022	1/2 - 1 Mile ESE
R78	CADWR8000012020	1/2 - 1 Mile ESE
83	CADWR8000012189	1/2 - 1 Mile NE
84	CADWR8000011973	1/2 - 1 Mile SE
T85	CADWR8000011943	1/2 - 1 Mile SSE
90	8248	1/2 - 1 Mile NE

PHYSICAL SETTING SOURCE MAP - 6174843.2s



SITE NAME: Helendale CSD Well Field ADDRESS: 20675 Helendale Road

LAT/LONG:

Helendale CA 92342 34.723909 / 117.345905 CLIENT: BCA Engineering Corp CONTACT: Randy Coleman INQUIRY#: 6174843.2s

DATE: August 31, 2020 3:06 pm

Map ID Direction Distance

Elevation Database EDR ID Number

East

Α1

FED USGS USGS40000152673

0 - 1/8 Mile Lower

Organization ID: USGS-CA

Organization Name: USGS California Water Science Center 007N004W06M001S Monitor Location: Well Type: 18090208 Description: Not Reported HUC: Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported

Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported Construction Date: Not Reported Well Depth: Not Reported Well Depth Units: Not Reported Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

A2 SSW CA WELLS CADWR8000012083 0 - 1/8 Mile

Higher

 State Well #:
 07N04W06M002S
 Station ID:
 5989

 Well Name:
 Not Reported
 Well Use:
 Unknown

Well Type: Unknown Well Depth: 0

Basin Name: Upper Mojave River Valley Well Completion Rpt #: Not Reported

A3 South 0 - 1/8 Mile

South CA WELLS CADWR8000012076

0 - 1/8 Mile Higher

Lower

 State Well #:
 07N04W06M003S
 Station ID:
 5990

 Well Name:
 Not Reported
 Well Use:
 Unknown

 Well Type:
 Unknown
 Well Depth:
 0

Basin Name: Upper Mojave River Valley Well Completion Rpt #: Not Reported

A4
ESE
0 - 1/8 Mile

FED USGS USGS40000152660

Organization ID: USGS-CA

Contrib Drainage Area:

 Organization Name:
 USGS California Water Science Center

 Monitor Location:
 007N004W06M002S
 Type:
 Well

 Description:
 Not Reported
 HUC:
 18090208

 Drainage Area:
 Not Reported
 Drainage Area Units:
 Not Reported

Aquifer: Basin and Range basin-fill aquifers

Not Reported

Formation Type: Not Reported Aquifer Type: Not Reported Construction Date: Not Reported Well Depth: Not Reported Well Depth Units: Not Reported Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

Not Reported

Contrib Drainage Area Unts:

1967-03-02 Ground water levels, Number of Measurements: 2 Level reading date: Feet below surface: Feet to sea level: Not Reported

Note: Not Reported

1958-06-10 Level reading date: Feet below surface: 5.12

Feet to sea level: Not Reported Note: Not Reported

A5 SE **FED USGS** USGS40000152646 0 - 1/8 Mile

Lower

Organization ID: **USGS-CA**

Organization Name: USGS California Water Science Center 007N004W06M003S Monitor Location: Well Type: Description: Not Reported HUC: 18090208 Drainage Area: Not Reported Not Reported Drainage Area Units: Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported

Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported

Construction Date: Not Reported Well Depth: 10.5 Well Hole Depth: Not Reported

Well Depth Units:

Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: 1 Level reading date: 1958-06-10 Feet below surface: Not Reported Feet to sea level: Not Reported

Note: The site was dry (no water level recorded).

B6 NNE

0 - 1/8 Mile Lower

> Organization ID: **USGS-CA**

Organization Name: USGS California Water Science Center 007N004W06M007S Monitor Location: Well Type:

Description: Not Reported Not Reported Drainage Area: Not Reported **Drainage Area Units:** Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported

Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported

Construction Date: 1990 Well Depth:

Well Depth Units: Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

C7 SSW **FED USGS** USGS40000152602

1/8 - 1/4 Mile Higher

> Organization ID: USGS-CA

Organization Name: USGS California Water Science Center

Monitor Location: 007N004W06N001S Well Type: Description: Not Reported 18090208 Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported

Basin and Range basin-fill aquifers Aquifer:

FED USGS

USGS40000152695

Formation Type: Not Reported Aquifer Type: Not Reported Construction Date: Not Reported Well Depth: Not Reported Well Depth Units: Not Reported Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: 27 Level reading date: 2005-02-09 Feet below surface: 33.11 Feet to sea level: Not Reported

Note: Not Reported

Level reading date: 2004-09-15 Feet below surface: 43.81

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 2004-03-10 Feet below surface: 33.48

Feet to sea level: Not Reported

Note: The water level was affected by stage in nearby surface-water site.

Level reading date: 2003-10-27 Feet below surface: 42.10

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 2003-04-01 Feet below surface: 35.19

Feet to sea level: Not Reported

Note: The water level was affected by stage in nearby surface-water site.

Level reading date: 2002-12-04 Feet below surface: 39.43

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 2002-04-24 Feet below surface: 35.79

Feet to sea level: Not Reported

Note: The water level was affected by stage in nearby surface-water site.

Level reading date: 2001-11-19 Feet below surface: 38.59

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 2000-03-22 Feet below surface: 35.50

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1999-10-12 Feet below surface: 41.51

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1999-03-24 Feet below surface: 32.39

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1998-10-07 Feet below surface: 37.77

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1998-04-07 Feet below surface: 33.67

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1997-10-09 Feet below surface: 42.46

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1997-03-18 Feet below surface: 36.00

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1996-10-07 Feet below surface: 43.46

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1996-03-28 Feet below surface: 38.72

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1995-11-09 Feet below surface: 40.28

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1995-03-22 Feet below surface: 37.62

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1994-11-15 Feet below surface: 63.04

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1994-03-23 Feet below surface: 52.83

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1993-11-18 Feet below surface: 60.08

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1992-11-19 Feet below surface: 69.61

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1992-05-07 Feet below surface: 69.26

Feet to sea level: Not Reported Note: The site had been pumped recently.

Level reading date: 1992-03-22 Feet below surface: 55.10

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1992-03-12 Feet below surface: 58.70

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1991-12-03 Feet below surface: 68.72

Feet to sea level: Not Reported Note: Not Reported

B8
NE CA WELLS CADWR8000012113

1/8 - 1/4 Mile

 State Well #:
 07N04W06F006S
 Station ID:
 23839

 Well Name:
 Not Reported
 Well Use:
 Unknown

Well Type: Unknown Well Depth: 0
Basin Name: Upper Mojave River Valley Well Completion Rpt #: No

Basin Name: Upper Mojave River Valley Well Completion Rpt #: Not Reported

C9
SSW
CA WELLS CADWR8000012062
1/8 - 1/4 Mile

Higher

 State Well #:
 07N04W06N001S
 Station ID:
 5991

 Well Name:
 WELL 15
 Well Use:
 Other

 Well Type:
 Single Well
 Well Depth:
 452

Basin Name: Upper Mojave River Valley Well Completion Rpt #: Not Reported

1/8 - 1/4 Mile Lower

 State Well #:
 07N04W06L001S
 Station ID:
 28027

 Well Name:
 Not Reported
 Well Use:
 Unknown

 Well Type:
 Unknown
 Well Depth:
 0

well Type. Olikilowii well Deptil. 0

Basin Name: Upper Mojave River Valley Well Completion Rpt #: Not Reported

D11 **CA WELLS** CADWR8000012087 **East**

1/8 - 1/4 Mile Lower

> 07N04W06L003S Station ID: 5988 State Well #: Well Name: Not Reported Well Use: Unknown

Well Type: Unknown Well Depth: Basin Name: Upper Mojave River Valley Well Completion Rpt #:

Not Reported

E12 **CA WELLS** CADWR8000012112 NE

1/8 - 1/4 Mile Lower

State Well #: 07N04W06F005S Station ID: 37443 Well Name: Not Reported Well Use: Unknown

Well Type: Unknown Well Depth:

Basin Name: Upper Mojave River Valley Well Completion Rpt #: Not Reported

D13 **FED USGS** USGS40000152672 **East**

1/8 - 1/4 Mile Lower

> USGS-CA Organization ID:

Organization Name: USGS California Water Science Center Monitor Location: 007N004W06L007S Well Type:

COMPUTER GENERATED LAT/LONG ACCURATE +/- 500 FT Description:

HUC: 18090208 Drainage Area: Not Reported **Drainage Area Units:** Not Reported Contrib Drainage Area: Not Reported

Contrib Drainage Area Unts: Basin and Range basin-fill aquifers Not Reported Aquifer:

Formation Type: Not Reported Aquifer Type: Not Reported

Construction Date: 1966 Well Depth: 198

Well Depth Units: Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

E14 **FED USGS** USGS40000152715

1/8 - 1/4 Mile Lower

> Organization ID: **USGS-CA**

Organization Name: USGS California Water Science Center Monitor Location: 007N004W06F006S Well Type:

Description: WELL B-3. Depth measured 19.79 ft in 2003.

HUC: Drainage Area: 18090208 Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported

Contrib Drainage Area Unts: Not Reported Aquifer: Basin and Range basin-fill aquifers

Aquifer Type: Formation Type: Not Reported Not Reported Construction Date: 19970618 Well Depth: 19.79 Well Depth Units: ft Well Hole Depth: 51

Well Hole Depth Units: ft

Ground water levels, Number of M Feet below surface: Note:	Measurements: 0.61 Not Reported	38	Level reading date: Feet to sea level:	2004-11-04 Not Reported
Level reading date:	2004-10-11		Feet below surface:	11.23
Feet to sea level:	Not Reported		Note:	Not Reported
Level reading date:	2004-09-09		Feet below surface:	10.24
Feet to sea level:	Not Reported		Note:	Not Reported
Level reading date:	2004-08-02		Feet below surface:	8.47
Feet to sea level:	Not Reported		Note:	Not Reported
Level reading date:	2004-07-12		Feet below surface:	7.27
Feet to sea level:	Not Reported		Note:	Not Reported
Level reading date:	2004-06-10		Feet below surface:	5.41
Feet to sea level:	Not Reported		Note:	Not Reported
Level reading date:	2004-05-10		Feet below surface:	3.57
Feet to sea level:	Not Reported		Note:	Not Reported
Level reading date:	2004-04-16		Feet below surface:	5.30
Feet to sea level:	Not Reported		Note:	Not Reported
Level reading date:	2004-03-29		Feet below surface:	4.63
Feet to sea level:	Not Reported		Note:	Not Reported
Level reading date:	2004-02-19		Feet below surface:	8.06
Feet to sea level:	Not Reported		Note:	Not Reported
Level reading date:	2004-01-15		Feet below surface:	10.32
Feet to sea level:	Not Reported		Note:	Not Reported
Level reading date:	2003-12-10		Feet below surface:	13.84
Feet to sea level:	Not Reported		Note:	Not Reported
Level reading date:	2003-11-14		Feet below surface:	13.52
Feet to sea level:	Not Reported		Note:	Not Reported
Level reading date:	2003-10-16		Feet below surface:	10.31
Feet to sea level:	Not Reported		Note:	Not Reported
Level reading date:	2003-09-03		Feet below surface:	8.70
Feet to sea level:	Not Reported		Note:	Not Reported
Level reading date:	2003-08-05		Feet below surface:	7.33
Feet to sea level:	Not Reported		Note:	Not Reported
Level reading date:	2003-07-14		Feet below surface:	6.08
Feet to sea level:	Not Reported		Note:	Not Reported
Level reading date:	2003-06-16		Feet below surface:	4.37
Feet to sea level:	Not Reported		Note:	Not Reported
Level reading date:	2003-05-13		Feet below surface:	2.35
Feet to sea level:	Not Reported		Note:	Not Reported
Level reading date:	2003-04-18		Feet below surface:	0.29

Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2002-03-19	Feet below surface:	4.25
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-07-21	Feet below surface:	4.63
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-06-15	Feet below surface:	3.13
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-05-15	Feet below surface:	1.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-04-17	Feet below surface:	0.21
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-03-15	Feet below surface:	0.14
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-02-23	Feet below surface:	0.21
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-01-18	Feet below surface:	6.86
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-05-17	Feet below surface:	2.10
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-04-19	Feet below surface:	0.18
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-03-15	Feet below surface:	0.12
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-01-19	Feet below surface:	7.26
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-12-16	Feet below surface:	6.94
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-11-15	Feet below surface:	6.73
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1998-10-27	Feet below surface:	9.15
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-10-16	Feet below surface:	8.22
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-08-06	Feet below surface:	5.28
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-06-18	Feet below surface:	3.42
Feet to sea level:	Not Reported	Note:	Not Reported

Map ID Direction Distance

Elevation Database EDR ID Number

D15 East

FED USGS USGS40000152671

1/4 - 1/2 Mile Lower

Organization ID: USGS-CA

Organization Name: USGS California Water Science Center

Monitor Location: USGS California Water Science Center

007N004W06L006S Type: Well

Description: COMPUTER GENERATED LAT/LONG ACCURATE +/- 500 FT

HUC:18090208Drainage Area:Not ReportedDrainage Area Units:Not ReportedContrib Drainage Area:Not Reported

Contrib Drainage Area Unts: Not Reported Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported Construction Date: 1959 Well Depth: 100 Well Depth Units: ft Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

E16
NE CA WELLS CADWR8000012110
1/4 - 1/2 Mile

Lower

State Well #: 07N04W06F003S Station ID: 29315
Well Name: Not Reported Well Use: Unknown

Well Type: Unknown Well Depth: 0

Basin Name: Upper Mojave River Valley Well Completion Rpt #: Not Reported

E17 NE

1/4 - 1/2 Mile Lower

 State Well #:
 07N04W06F004S
 Station ID:
 5444

 Well Name:
 Not Reported
 Well Use:
 Unknown

Well Type: Unknown Well Depth: 0
Basin Name: Upper Mojave River Valley Well Completion Rpt #: Not Reported

1/4 - 1/2 Mile Lower

Contrib Drainage Area:

Organization ID: USGS-CA

 Organization Name:
 USGS California Water Science Center

 Monitor Location:
 007N004W06L001S
 Type:
 Well

 Description:
 Not Reported
 HUC:
 18090208

 Drainage Area:
 Not Reported
 Drainage Area Units:
 Not Reported

Aquifer: Basin and Range basin-fill aquifers

Not Reported

Formation Type: Not Reported Aquifer Type: Not Reported

Construction Date: Not Reported Well Depth: 110

Construction Date. Not Reported Well Depth. 110

Well Depth Units: ft Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

Not Reported

Contrib Drainage Area Unts:

CA WELLS

CADWR8000012111

Ground water levels, Number of Measurements: 1 Level reading date: 1958-06-12 Feet below surface: 11.51 Feet to sea level: Not Reported

Note: Not Reported

D19
East CA WELLS CADWR8000012082

1/4 - 1/2 Mile Lower

 State Well #:
 07N04W06L004S
 Station ID:
 28028

 Well Name:
 Not Reported
 Well Use:
 Unknown

 Well Type:
 Unknown
 Well Depth:
 0

Basin Name: Upper Mojave River Valley Well Completion Rpt #: Not Reported

ENE FED USGS USGS40000152714

1/4 - 1/2 Mile Lower

Organization ID:

wei

Organization Name: USGS California Water Science Center

USGS-CA

Monitor Location: 007N004W06F005S Type: Well

Description: Well destroyed during 2004-05 Winter Stormflows.

HUC:18090208Drainage Area:Not ReportedDrainage Area Units:Not ReportedContrib Drainage Area:Not Reported

Contrib Drainage Area Unts: Not Reported Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported

Construction Date: 19970619 Well Depth: 90.51 Well Depth Units: ft Well Hole Depth: 100

Well Hole Depth Units: ft

Ground water levels, Number of Measurements: 40 Level reading date: 2004-11-04

Feet below surface: 13.18 Feet to sea level: Not Reported

Note: Not Reported

Level reading date: 2004-10-11 Feet below surface: 25.93

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 2004-09-09 Feet below surface: 28.03

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 2004-08-02 Feet below surface: 24.43

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 2004-07-12 Feet below surface: 27.96

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 2004-06-10 Feet below surface: 22.69

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 2004-05-10 Feet below surface: 22.45

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 2004-04-16 Feet below surface: 16.29

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 2004-03-29 Feet below surface: 16.34

Feet to sea level: Not Reported Note: Not Reported

Level reading date:	2004-02-19	Feet below surface:	11.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-01-15	Feet below surface:	16.43
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-12-10	Feet below surface:	20.07
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-11-14	Feet below surface:	19.93
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-10-16	Feet below surface:	25.19
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-09-03	Feet below surface:	27.14
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-08-05	Feet below surface:	23.39
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-07-14	Feet below surface:	29.03
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-06-16	Feet below surface:	26.11
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-05-13	Feet below surface:	20.64
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-04-18	Feet below surface:	16.51
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2002-03-19	Feet below surface:	13.76
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2002-01-31	Feet below surface:	12.97
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-07-15	Feet below surface:	27.07
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-06-15	Feet below surface:	20.94
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-05-15	Feet below surface:	17.69
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-04-17	Feet below surface:	14.80
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-03-15	Feet below surface:	9.67
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-02-23	Feet below surface:	10.16
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-01-18	Feet below surface:	22.30
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-05-17	Feet below surface:	26.21
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date: 2000-04-19 Feet below surface: 15.24 Feet to sea level: Not Reported Note: Not Reported

Level reading date: 2000-03-15 Feet below surface: 9.79

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 2000-02-17 Feet below surface: 10.72

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 2000-01-19 Feet below surface: 14.86

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1999-12-16 Feet below surface: 15.84

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1999-11-15 Feet below surface: 14.19

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1998-10-27 Feet below surface: 20.77

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1997-10-16 Feet below surface: 18.64

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1997-08-06 Feet below surface: 21.25

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1997-06-19 Feet below surface: 21.19

Feet to sea level: Not Reported Note: Not Reported

F21
East FED USGS USGS40000152669
1/4 - 1/2 Mile

Organization ID: USGS-CA

 Organization Name:
 USGS California Water Science Center

 Monitor Location:
 007N004W06L003S
 Type:
 Well

 Description:
 Not Reported
 HUC:
 18090208

 Drainage Area:
 Not Reported
 Drainage Area Units:
 Not Reported

 Contrib Drainage Area:
 Not Reported
 Contrib Drainage Area Units:
 Not Reported

Contrib Drainage Area: Not Reported
Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported

Construction Date: 1954 Well Depth: 108

Well Depth Units: ft Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: 1 Level reading date: 1958-06-12 Feet below surface: 11 Feet to sea level: Not Reported

Note: Not Reported

F22
East FED USGS USGS40000152659

1/4 - 1/2 Mile Lower

Organization ID: USGS-CA

Organization Name: USGS California Water Science Center

Monitor Location: 007N004W06L002S Type: Well

Description:Not ReportedHUC:18090208Drainage Area:Not ReportedDrainage Area Units:Not ReportedContrib Drainage Area:Not ReportedContrib Drainage Area Units:Not Reported

Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported

Construction Date: 1945 Well Depth: 40

Well Depth Units: ft Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: 1 Level reading date: 1958-06-12 Feet below surface: 10 Feet to sea level: Not Reported

Note: Not Reported

G23
ENE FED USGS USGS40000152713

1/4 - 1/2 Mile Lower

Organization ID: USGS-CA

Organization Name: USGS California Water Science Center

Monitor Location: 007N004W06F004S Type: Well

Description: WELL B-1. Depth measured 25.91 ft in 2003

HUC: 18090208 Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported

Contrib Drainage Area Unts: Not Reported Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported

Construction Date: 19970619 Well Depth: 25.91
Well Depth Units: ft Well Hole Depth: 51

Well Hole Depth Units: ft

Ground water levels, Number of Measurements: 36 Level reading date: 2004-11-04

Feet below surface: 5.79 Feet to sea level: Not Reported

Note: Not Reported

Level reading date: 2004-10-11 Feet below surface: 13.92

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 2004-09-09 Feet below surface: 12.93

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 2004-08-02 Feet below surface: 11.21

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 2004-07-12 Feet below surface: 10.07

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 2004-06-10 Feet below surface: 8.40

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 2004-05-10 Feet below surface: 6.74

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 2004-04-16 Feet below surface: 1.88

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 2004-03-29 Feet below surface: 0.34

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 2004-02-19 Feet below surface: 0.57

Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-01-15	Feet below surface:	6.97
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-12-10	Feet below surface:	11.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-11-14	Feet below surface:	10.88
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-10-16	Feet below surface:	12.95
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-09-03	Feet below surface:	11.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-08-05	Feet below surface:	10.08
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-07-14	Feet below surface:	8.96
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-06-16	Feet below surface:	7.39
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-05-13	Feet below surface:	5.57
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-04-18	Feet below surface:	4.41
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-07-19	Feet below surface:	7.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-06-15	Feet below surface:	6.14
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-05-15	Feet below surface:	4.75
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-04-17	Feet below surface:	3.94
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-03-15	Feet below surface:	4.11
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-02-23	Feet below surface:	4.48
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-01-18	Feet below surface:	11.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-05-17	Feet below surface:	7.87
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-04-19	Feet below surface:	3.95
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-03-15	Feet below surface:	3.96
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date: 2000-02-17 Feet below surface: 4.60

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 2000-01-19 Feet below surface: 10.01

Feet to sea level: Not Reported Not Reported Note:

Level reading date: 1999-12-16 Feet below surface: 9.69

Feet to sea level: Not Reported Note: Not Reported

1999-11-15 9.49 Level reading date: Feet below surface:

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1998-10-27 Feet below surface: 10.60

Feet to sea level: Not Reported Not Reported Note:

Level reading date: 1997-08-06 Feet below surface: 7.53

Feet to sea level: Not Reported Note: Not Reported

G24 CA WELLS CADWR8000012109 **ENE**

1/4 - 1/2 Mile Lower

> State Well #: 07N04W06F002S Station ID: 5443 Well Name: Not Reported Well Use: Unknown

Well Type: Unknown Well Depth:

Basin Name: Upper Mojave River Valley Well Completion Rpt #: Not Reported

25 SW **FED USGS** USGS40000152574

1/4 - 1/2 Mile Higher

> Organization ID: **USGS-CA**

Organization Name: USGS California Water Science Center Monitor Location: 007N005W01R001S Well Type:

Description: COMPUTER GENERATED LAT/LONG +/- 500FT HUC: 18090208 Drainage Area: Not Reported

Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported Aquifer: Contrib Drainage Area Unts: Not Reported Basin and Range basin-fill aquifers

Not Reported

Formation Type: Not Reported Aquifer Type:

Construction Date: Not Reported Well Depth:

Well Depth Units: Well Hole Depth:

Not Reported Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: 2 Level reading date: 1958-02-27

Feet below surface: 105 Feet to sea level: Not Reported

Note: Not Reported

Level reading date: 1932-12-08 Feet below surface: 27.2

Feet to sea level: Not Reported Note: Not Reported

Map ID Direction Distance

Elevation Database EDR ID Number

H26

CA WELLS CADWR8000012052

1/4 - 1/2 Mile Lower

State Well #: 07N04W06P001S Station ID: 5992
Well Name: Not Reported Well Use: Unknown

Well Type: Unknown Well Depth: 0

Basin Name: Upper Mojave River Valley Well Completion Rpt #: Not Reported

F27 East 1/4 - 1/2 Mile

East FED USGS USGS40000152658

1/4 - 1/2 Mile Lower

Organization ID: USGS-CA

Organization Name: USGS California Water Science Center

Monitor Location: 007N004W06L004S Well Type: Description: Not Reported HUC: 18090208 Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported

Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported

Construction Date: 1951 Well Depth: 107

Well Depth Units: ft Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: 1 Level reading date: 1958-06-12 Feet below surface: 11 Feet to sea level: Not Reported

Note: The site was being pumped.

H28 SE FED USGS USGS40000152582

1/4 - 1/2 Mile Lower

Organization ID: USGS-CA

Organization Name: USGS California Water Science Center
Monitor Location: 007N004W06P002S Type:

Monitor Location:007N004W06P002SType:WellDescription:Not ReportedHUC:18090208Drainage Area:Not ReportedDrainage Area Units:Not ReportedContrib Drainage Area:Not ReportedContrib Drainage Area Units:Not Reported

Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported Construction Date: 19580606 Well Depth: Not Reported Well Depth Units: Not Reported Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

Map ID Direction Distance

Database EDR ID Number Elevation

G29

ENE **CA WELLS** CADWR8000012105 1/4 - 1/2 Mile

Lower

07N04W06F007S State Well #: Station ID: 50191 BPF well Well Use: Observation Well Name:

Single Well Well Depth: Well Type: 30

E0104718 Basin Name: Upper Mojave River Valley Well Completion Rpt #:

30 **FED USGS** USGS40000152783

1/4 - 1/2 Mile Lower

Organization ID: **USGS-CA** Organization Name: USGS California Water Science Center

Monitor Location: 007N004W06F001S Well Type: HUC: Description: Not Reported 18090208 Not Reported Drainage Area: Not Reported Drainage Area Units: Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported

Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported Construction Date: Not Reported Well Depth: Not Reported Well Depth Units: Not Reported Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

H31 FED USGS USGS40000152568

1/4 - 1/2 Mile Lower

> Organization ID: USGS-CA

USGS California Water Science Center Organization Name: Monitor Location: 007N004W06P001S Type: Well Description: Not Reported HUC: 18090208 Drainage Area: Not Reported Not Reported Drainage Area Units: Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported

Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported

Construction Date: 1946 Well Depth:

Well Depth Units: Well Hole Depth: ft Not Reported

Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: 1 Level reading date: 1958-06-06 Feet below surface: 17.51 Feet to sea level: Not Reported

Note: Not Reported

Map ID Direction Distance

Elevation Database EDR ID Number

ENE 1/4 - 1/2 Mile FED USGS USGS40000152700

1/4 - 1/2 Mile Lower

Organization ID: USGS-CA

Organization Name: USGS California Water Science Center

Monitor Location: 007N004W06F007S Type: Well

Description: Not Reported HUC: Not Reported Drainage Area: Not Reported Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Units: Not Reported

Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported

Construction Date: 200903 Well Depth: 30 Well Depth Units: ft Well Hole Depth: 33

Well Hole Depth Units: ft

33 ESE FED USGS USGS40000152619 1/4 - 1/2 Mile

Lower

Organization ID: USGS-CA

Organization Name: USGS California Water Science Center
Monitor Location: 007N004W06L005S Type:

Monitor Location:007N004W06L005SType:WellDescription:Not ReportedHUC:18090208Drainage Area:Not ReportedDrainage Area Units:Not ReportedContrib Drainage Area:Not ReportedContrib Drainage Area Units:Not Reported

Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported

Construction Date: Not Reported Well Depth: 120

Well Depth Units: ft Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

34 SSW CA WELLS CADWR8000012054

1/4 - 1/2 Mile Lower

 State Well #:
 07N05W01R001S
 Station ID:
 6856

 Well Name:
 Palisades River Well
 Well Use:
 Unknown

 Well Type:
 Single Well
 Well Depth:
 428

Basin Name: Upper Mojave River Valley Well Completion Rpt #: Not Reported

I35
ENE CA WELLS CADWR8000012140
1/4 - 1/2 Mile

Lower

 State Well #:
 07N04W06G001S
 Station ID:
 29316

 Well Name:
 Not Reported
 Well Use:
 Unknown

 Well Type:
 Unknown
 Well Depth:
 0

Basin Name: Upper Mojave River Valley Well Completion Rpt #: Not Reported

Map ID Direction Distance

Elevation Database EDR ID Number

I36 ENE

1/4 - 1/2 Mile

Lower

State Well #: 07N04W06G004S Station ID: 29317
Well Name: Not Reported Well Use: Unknown

Well Type: Unknown Well Depth: 0

Basin Name: Upper Mojave River Valley Well Completion Rpt #: Not Reported

J37

North CA WELLS CADWR8000012190

1/4 - 1/2 Mile Lower

State Well #: 07N04W06D002S Station ID: 5442
Well Name: Not Reported Well Use: Unknown

Well Type: Unknown Well Depth: 0

Basin Name: Upper Mojave River Valley Well Completion Rpt #: Not Reported

J38

North FED USGS USGS40000152889

1/4 - 1/2 Mile Lower

Organization ID: USGS-CA

Organization Name: USGS California Water Science Center

Monitor Location: 007N004W06D001S Well Type: Description: Not Reported HUC: 18090208 Drainage Area: Not Reported **Drainage Area Units:** Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported

Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported Construction Date: Not Reported Well Depth: Not Reported Well Depth Units: Not Reported Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: 1 Level reading date: 1958-06-05
Feet below surface: Not Reported Feet to sea level: Not Reported

Note: The site was being pumped.

J39

North 1/4 - 1/2 Mile

Organization ID: USGS-CA

Organization Name: USGS California Water Science Center

Monitor Location: 007N004W06D003S Well Type: Description: Not Reported HUC: 18090208 Drainage Area: Not Reported **Drainage Area Units:** Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported

Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported

FED USGS

USGS40000152890

Construction Date: Well Depth: Not Reported Not Reported Well Depth Units: Not Reported Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

140 **FED USGS** USGS40000152741

1/4 - 1/2 Mile Lower

> Organization ID: **USGS-CA**

Organization Name: USGS California Water Science Center 007N004W06G005S Monitor Location: Well Type: HUC: 18090208 Description: Not Reported Drainage Area: Not Reported **Drainage Area Units:** Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported

Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported Construction Date: Not Reported Well Depth: Not Reported Well Depth Units: Not Reported Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

J41 **FED USGS** USGS40000152888 North 1/4 - 1/2 Mile

Lower

Organization ID: **USGS-CA**

Organization Name: USGS California Water Science Center 007N004W06D002S Monitor Location: Well Type: Description: 18090208 Not Reported HUC: Drainage Area Units: Drainage Area: Not Reported Not Reported Contrib Drainage Area Unts: Not Reported

Contrib Drainage Area: Not Reported

Basin and Range basin-fill aquifers Aquifer:

Formation Type: Not Reported Aquifer Type: Not Reported Construction Date: Not Reported Well Depth: Not Reported Well Depth Units: Not Reported Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

1958-06-05 Ground water levels, Number of Measurements: 1 Level reading date: Feet below surface: Feet to sea level: Not Reported Not Reported

Note: The site was being pumped.

CA WELLS CADWR8000012191

North 1/4 - 1/2 Mile Lower

> State Well #: 07N04W06D001S Station ID: 29314 Well Name: Not Reported Well Use: Unknown

Well Type: Unknown Well Depth:

Well Completion Rpt #: Basin Name: Upper Mojave River Valley Not Reported

Map ID Direction Distance

Elevation Database EDR ID Number

ENE

CA WELLS CADWR8000012139

Not Reported

1/2 - 1 Mile Lower

State Well #: 07N04W06G003S Station ID: 5445
Well Name: Not Reported Well Use: Unknown

Well Type: Unknown Well Depth: 0

Basin Name: Upper Mojave River Valley Well Completion Rpt #: Not Reported

K44
ENE FED USGS USGS40000152740

1/2 - 1 Mile Lower

Organization ID: USGS-CA

Organization Name: USGS California Water Science Center

Monitor Location: 007N004W06G006S Well Type: Description: Not Reported HUC: 18090208 Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported

Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported

Construction Date: Not Reported Well Depth: 100

Well Depth Units: ft

Well Hole Depth Units: Not Reported

L45
ESE CA WELLS CADWR8000012051

Well Hole Depth:

1/2 - 1 Mile Lower

 State Well #:
 07N04W06Q001S
 Station ID:
 5993

 Well Name:
 Not Reported
 Well Use:
 Unknown

 Well Type:
 Unknown
 Well Depth:
 0

Basin Name: Upper Mojave River Valley Well Completion Rpt #: Not Reported

K46
ENE FED USGS USGS40000152765
1/2 - 1 Mile

1/2 - 1 Mi Lower

Organization ID: USGS-CA

USGS California Water Science Center Organization Name: Monitor Location: 007N004W06G001S Well Type: Not Reported Description: HUC: 18090207 Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported

Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Unconfined single aquifer

Construction Date: Not Reported Well Depth: 30

Well Depth Units: ft Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: 1 Level reading date: 1987-04-22 Feet below surface: 11.49 Feet to sea level: Not Reported

Note: The site had been pumped recently.

K47
ENE FED USGS USGS40000152764

1/2 - 1 Mile Lower

Organization ID: USGS-CA

Organization Name: USGS California Water Science Center Monitor Location: 007N004W06G003S Well Type: Description: Not Reported HUC: 18090208 Not Reported Drainage Area: Not Reported **Drainage Area Units:** Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported

Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported

Construction Date: Not Reported Well Depth: 50.6

Well Depth Units: ft Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: 1 Level reading date: 1958-06-12 Feet below surface: 9.84 Feet to sea level: Not Reported

Note: Not Reported

M48
SSE CA WELLS CADWR8000011975

1/2 - 1 Mile Lower

 State Well #:
 07N04W07C001S
 Station ID:
 6004

 Well Name:
 Not Reported
 Well Use:
 Unknown

Well Type: Unknown Well Depth: 0

Basin Name: Upper Mojave River Valley Well Completion Rpt #: Not Reported

K49
ENE FED USGS USGS40000152748

1/2 - 1 Mile Lower

Organization ID: USGS-CA

USGS California Water Science Center Organization Name: Monitor Location: 007N004W06G004S Well Type: Description: Not Reported HUC: 18090208 Drainage Area: Not Reported **Drainage Area Units:** Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported

Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported Construction Date: Not Reported Well Depth: Not Reported Well Depth Units: Not Reported Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: 1 Level reading date: 1958-06-12 Feet below surface: 12.19 Feet to sea level: Not Reported

Note: Not Reported

Map ID Direction Distance

Elevation EDR ID Number Database

NNE

FED USGS USGS40000152887

1/2 - 1 Mile Lower

> Organization ID: **USGS-CA**

Organization Name: USGS California Water Science Center Monitor Location: 007N005W5D001S Well Type:

Description: COMPUTER GENERATED LAT/LONG +/- 500FT

HUC: 18090208 Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported

Contrib Drainage Area Unts: Not Reported Aquifer: Basin and Range basin-fill aquifers

Aquifer Type: Formation Type: Not Reported Not Reported

Construction Date: Well Depth: Not Reported 54.5 Well Hole Depth: Not Reported

Well Depth Units: Well Hole Depth Units: Not Reported

ESE

CA WELLS CADWR8000012050 1/2 - 1 Mile

Lower

07N04W06Q002S State Well #: Station ID: 5994 Unknown Well Name: Not Reported Well Use: Well Type: Unknown Well Depth:

Basin Name: Upper Mojave River Valley Well Completion Rpt #: Not Reported

M52 SSE **FED USGS** USGS40000152407 1/2 - 1 Mile

Lower

Organization ID: USGS-CA

USGS California Water Science Center Organization Name: Monitor Location: 007N004W07C001S Type: Well

COMPUTER GENERATED LAT/LONG +/- 500 FT Description: HUC: 18090208 Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported

Contrib Drainage Area Unts: Not Reported Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported

Construction Date: 1938 Well Depth:

Well Depth Units: Well Hole Depth: ft Not Reported

Well Hole Depth Units: Not Reported

1958-06-06 Ground water levels, Number of Measurements: 1 Level reading date: Feet below surface: Not Reported Feet to sea level: Not Reported

The site was dry (no water level recorded). Note:

Map ID Direction Distance

Elevation Database EDR ID Number

ENE FED USGS USGS40000152782

1/2 - 1 Mile Lower

Organization ID: USGS-CA

Organization Name: USGS California Water Science Center

Monitor Location: USGS California Water Science Center

007N004W06G002S Type: Well

Description: COMPUTER GENERATED LAT/LONG ACCURATE +- 500 FT

HUC:18090208Drainage Area:Not ReportedDrainage Area Units:Not ReportedContrib Drainage Area:Not Reported

Contrib Drainage Area Unts: Not Reported Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported Construction Date: Not Reported Well Depth: Not Reported Well Depth Units: Not Reported Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

L54
ESE FED USGS USGS40000152567

1/2 - 1 Mile Lower

Organization ID: USGS-CA

 Organization Name:
 USGS California Water Science Center

 Monitor Location:
 007N004W06Q001S
 Type:
 Well

 Description:
 Not Reported
 HUC:
 18090208

 Drainage Area:
 Not Reported
 Drainage Area Units:
 Not Reported

Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Units: Not Reported

Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported

Construction Date: 1908 Well Depth: 50

Well Depth Units: ft Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: 1 Level reading date: 1958-06-12 Feet below surface: 14 Feet to sea level: Not Reported

Note: The site was being pumped.

55 ESE FED USGS USGS40000152566

1/2 - 1 Mile Lower

Organization ID: USGS-CA

Organization Name: USGS California Water Science Center

007N004W06Q002S Well Monitor Location: Type: Description: Not Reported HUC: 18090208 Not Reported Drainage Area: Not Reported Drainage Area Units: Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported

Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported

Construction Date: 1956 Well Depth: 150

Well Depth Units: ft Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: 1 Level reading date: 1958-06-12 Feet below surface: 14 Feet to sea level: Not Reported

Note: The site was being pumped.

N56
East CA WELLS CADWR8000012086

1/2 - 1 Mile Lower

 State Well #:
 07N04W06J002S
 Station ID:
 5446

 Well Name:
 Not Reported
 Well Use:
 Unknown

 Well Type:
 Unknown
 Well Depth:
 0

Basin Name: Upper Mojave River Valley Well Completion Rpt #: Not Reported

O57

SE 1/2 - 1 Mile Lower

State Well #: 07N04W07B002S Station ID: 28029

Well Name: Not Reported Well Use: Unknown Well Type: Unknown Well Depth: 0

Basin Name: Upper Mojave River Valley Well Completion Rpt #: Not Reported

N58
East FED USGS USGS40000152668

1/2 - 1 Mile Lower

Organization ID: USGS-CA

Organization Name: USGS California Water Science Center

Monitor Location: 007N004W06J002S Well Type: 18090208 Description: Not Reported HUC: Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported

Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported

Construction Date: Not Reported Well Depth: 79

Well Depth Units: ft Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: 1 Level reading date: 1958-06-11 Feet below surface: 20 Feet to sea level: Not Reported

Note: The site had been pumped recently.

059 SE CA WELLS CADWR8000011970

1/2 - 1 Mile Lower

State Well #: 07N04W07B003S Station ID: 6003
Well Name: Not Reported Well Use: Unknown

Well Type: Unknown Well Depth: 0

Basin Name: Upper Mojave River Valley Well Completion Rpt #: Not Reported

CA WELLS

CADWR8000011974

Map ID Direction Distance

Elevation Database EDR ID Number

P60 **ESE**

1/2 - 1 Mile

CA WELLS CADWR8000012023

Lower

State Well #: 07N04W06R006S Station ID: 5999 Well Name: Not Reported Well Use: Unknown

Well Type: Unknown Well Depth:

Basin Name: Upper Mojave River Valley Well Completion Rpt #: Not Reported

ENE **CA WELLS** CADWR8000012121

1/2 - 1 Mile Lower

> 07N04W06J003S State Well #: Station ID: 5447 Well Name: Not Reported Well Use: Unknown

Well Type: Unknown Well Depth:

Basin Name: Upper Mojave River Valley Well Completion Rpt #: Not Reported

O62 SE

CA WELLS CADWR8000011963

1/2 - 1 Mile Lower

> State Well #: 07N04W07B001S Station ID: 6002 Well Name: Not Reported Well Use: Unknown

Well Type: Well Depth: Unknown n

Basin Name: Upper Mojave River Valley Well Completion Rpt #: Not Reported

O63 SE **FED USGS** USGS40000152406 1/2 - 1 Mile Lower

USGS-CA Organization ID:

Organization Name: USGS California Water Science Center

Monitor Location: 007N004W07B002S Well Type: 18090208 Description: Not Reported HUC: Drainage Area: Not Reported Not Reported Drainage Area Units: Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported

Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported

Construction Date: Well Depth: 1954 30

Well Hole Depth: Well Depth Units: ft Not Reported

Well Hole Depth Units: Not Reported

1958-06-04 Ground water levels, Number of Measurements: 1 Level reading date: Feet below surface: Feet to sea level: Not Reported 18

Note: Not Reported

Map ID Direction Distance

EDR ID Number Elevation Database

1/2 - 1 Mile

064

Lower

FED USGS USGS40000152397

Organization ID: **USGS-CA**

USGS California Water Science Center Organization Name:

Monitor Location: 007N004W07B003S Well Type: Description: Not Reported HUC: 18090208 Not Reported Drainage Area Units: Not Reported Drainage Area: Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported

Basin and Range basin-fill aquifers Aquifer:

Formation Type: Aquifer Type: Not Reported Not Reported Construction Date: Not Reported Well Depth: Not Reported Well Depth Units: Not Reported Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: 23 2002-04-24 Level reading date:

Feet below surface: 21.04 Feet to sea level: Not Reported

Note: Not Reported

Feet below surface: 2001-11-19 Level reading date: 22.69

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 2001-03-21 Feet below surface: 23.86 Not Reported

Feet to sea level: Not Reported Note:

2000-10-17 Feet below surface: 21.68 Level reading date:

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 2000-03-22 Feet below surface: 22.66

Feet to sea level: Not Reported

Note: A nearby site that taps the same aquifer was being pumped.

Level reading date: 1999-10-12 Feet below surface: 19.12

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1999-03-24 Feet below surface: 17.22

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1998-10-07 Feet below surface: 18.72

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1998-04-07 Feet below surface: 18.18

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1997-10-09 Feet below surface: 20.78

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1997-03-18 Feet below surface: 17.21

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1996-10-07 Feet below surface: 20.35

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1996-03-28 Feet below surface: 19.01

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1995-11-09 Feet below surface: 20.42

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1995-03-21 Feet below surface: 19.53

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1994-11-16 Feet below surface: 23.31

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1994-03-24 Feet below surface: 19.42

Feet to sea level: Not Reported Note: The site had been pumped recently.

Level reading date: 1993-11-16 Feet below surface: 22.65

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1993-03-24 Feet below surface: 19.30

Feet to sea level: Not Reported Note: The site was being pumped.

Level reading date: 1992-11-17 Feet below surface: 26.63

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1992-03-09 Feet below surface: 26.70

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1991-11-19 Feet below surface: 28.10

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1967-03-02 Feet below surface: 18.73

Feet to sea level: Not Reported Note: Not Reported

P65
ESE CA WELLS CADWR8000012034

1/2 - 1 Mile

 State Well #:
 07N04W06R002S
 Station ID:
 5995

 Well Name:
 Not Reported
 Well Use:
 Unknown

Well Type: Unknown Well Depth: 0

Basin Name: Upper Mojave River Valley Well Completion Rpt #: Not Reported

O66
SE FED USGS USGS40000152386

1/2 - 1 Mile Lower

Organization ID: USGS-CA

Organization Name: USGS California Water Science Center

Monitor Location: USGS California Water Science Center

007N004W07B001S Type: Well

Description: COMPUTER GENERATED LAT/LONG +/- 500 FT

HUC:18090208Drainage Area:Not ReportedDrainage Area Units:Not ReportedContrib Drainage Area:Not Reported

Contrib Drainage Area Unts: Not Reported Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported

Construction Date: 195202 Well Depth: 60

Well Depth Units: ft Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: 1 Level reading date: 1958-06-04 Feet below surface: 23 Feet to sea level: Not Reported

Note: Not Reported

ESE CA WELLS CADWR8000012021

1/2 - 1 Mile Lower

State Well #: 07N04W06R004S Station ID: 5997
Well Name: Not Reported Well Use: Unknown

Well Type: Unknown Well Depth: 0

Basin Name: Upper Mojave River Valley Well Completion Rpt #: Not Reported

P68
ESE CA WELLS CADWR8000012022

1/2 - 1 Mile Lower

 State Well #:
 07N04W06R005S
 Station ID:
 5998

 Well Name:
 Not Reported
 Well Use:
 Unknown

Well Type: Unknown Well Depth: 0

Basin Name: Upper Mojave River Valley Well Completion Rpt #: Not Reported

P69
ESE FED USGS USGS40000152504

ESE 1/2 - 1 Mile Lower

Organization ID: USGS-CA

Organization Name: USGS California Water Science Center

Monitor Location: 007N004W06R007S Type: Well Description: Not Reported HUC: 18090208 Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported Not Reported Contrib Drainage Area Unts:

Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported Construction Date: Not Reported Well Depth: Not Reported Well Depth Units: Not Reported Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

Q70
East FED USGS USGS40000152667

1/2 - 1 Mile Lower

Organization ID: USGS-CA

Organization Name: USGS California Water Science Center

Monitor Location:007N004W06J001SType:WellDescription:LAT/LONG, ETC.HUC:18090208Drainage Area:Not ReportedDrainage Area Units:Not ReportedContrib Drainage Area:Not ReportedContrib Drainage Area Units:Not Reported

Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported Construction Date: Not Reported Well Depth: Not Reported Well Depth Units: Not Reported Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

Map ID Direction Distance

Elevation Database EDR ID Number

ESE

FED USGS USGS40000152503

1/2 - 1 Mile Lower

Organization ID: USGS-CA

Organization Name: USGS California Water Science Center 007N004W06R006S Monitor Location: Well Type: 18090208 Description: Not Reported HUC: Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported

Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported Construction Date: Not Reported Well Depth: Not Reported Well Depth Units: Not Reported Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: 1 Level reading date: 1958-06-11 Feet below surface: 26.88 Feet to sea level: Not Reported

Note: Not Reported

72 North FED USGS USGS40000153020

1/2 - 1 Mile Lower

Organization ID: USGS-CA

Organization Name: USGS California Water Science Center

Monitor Location: USGS California Water Science Center

008N004W31N001S Type: Well

Description: COMPUTER GENERATED LAT/LONG +/- 500FT

HUC: 18090208 Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported

Contrib Drainage Area Unts: Not Reported Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported Construction Date: Not Reported Well Depth: Not Reported Well Depth Units: Not Reported Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

ESE 1/2 - 1 Mile Lower

Organization ID: USGS-CA

Organization Name: USGS California Water Science Center

Monitor Location: 007N004W06R005S Well Type: Description: Not Reported HUC: 18090208 Not Reported Drainage Area: Not Reported Drainage Area Units: Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported

Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported

Construction Date: 1954 Well Depth: 36

Well Depth Units: ft Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

FED USGS

USGS40000152502

Ground water levels, Number of Measurements: 1 Level reading date: 1958-06-11 Feet below surface: 18 Feet to sea level: Not Reported

Note: Not Reported

S74
ENE FED USGS USGS40000152732

1/2 - 1 Mile Lower

Organization ID: USGS-CA

Organization Name: USGS California Water Science Center Monitor Location: 007N004W06J003S Well Type: Description: Not Reported HUC: 18090208 Drainage Area: Not Reported **Drainage Area Units:** Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported

Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported

Construction Date: Not Reported Well Depth: 20.5

Well Depth Units: ft Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: 1 Level reading date: 1958-06-11 Feet below surface: Not Reported Feet to sea level: Not Reported

Note: The site was dry (no water level recorded).

75 ENE FED USGS USGS40000152796

1/2 - 1 Mile Lower

Organization ID: USGS-CA

Organization Name: USGS California Water Science Center Monitor Location: 007N004W06H002S Well Type: Description: Not Reported HUC: 18090208 Drainage Area: Not Reported **Drainage Area Units:** Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported

Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported Construction Date: Not Reported Well Depth: Not Reported Well Depth Units: Not Reported Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

R76
ESE FED USGS USGS40000152501

1/2 - 1 Mile Lower

Organization ID: USGS-CA

USGS California Water Science Center Organization Name: Monitor Location: 007N004W06R004S Well Type: Description: Not Reported HUC: 18090208 Drainage Area: Not Reported **Drainage Area Units:** Not Reported Contrib Drainage Area: Contrib Drainage Area Unts: Not Reported Not Reported

Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported

Construction Date: 1927 Well Depth: 48.1

Well Depth Units: ft Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: 1 Level reading date: 1958-06-11 Feet below surface: 25.02 Feet to sea level: Not Reported

Note: Not Reported

Q77
East FED USGS USGS40000152657

1/2 - 1 Mile Lower

Organization ID: USGS-CA

Organization Name: USGS California Water Science Center 007N004W06J004S Monitor Location: Well Type: Description: Not Reported HUC: 18090208 Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported

Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported Construction Date: Not Reported Well Depth: Not Reported Well Depth Units: Not Reported Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

R78
ESE CA WELLS CADWR8000012020
1/2 - 1 Mile

Lower

State Well #: 07N04W06R003S Station ID: 5996
Well Name: Not Reported Well Use: Unknown

Well Type: Unknown Well Depth: 0

Basin Name: Upper Mojave River Valley Well Completion Rpt #: Not Reported

R79
ESE FED USGS USGS40000152529

1/2 - 1 Mile Lower

Organization ID: USGS-CA

Organization Name: USGS California Water Science Center Monitor Location: 007N004W06R002S T

Monitor Location:007N004W06R002SType:WellDescription:Not ReportedHUC:18090208Drainage Area:Not ReportedDrainage Area Units:Not ReportedContrib Drainage Area:Not ReportedContrib Drainage Area Units:Not Reported

Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported

Construction Date: Not Reported Well Depth: 49.3

Well Depth Units: ft Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: 1 Level reading date: 1958-06-11 Feet below surface: 21.96 Feet to sea level: Not Reported

Note: Not Reported

Map ID Direction Distance

Elevation Database EDR ID Number

1/2 - 1 Mile Lower

Organization ID: USGS-CA

USGS California Water Science Center Organization Name: 007N004W06H001S Monitor Location: Well Type: Description: Not Reported HUC: 18090208 Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported

Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported Construction Date: 1947 Well Depth: Not Reported Well Depth Units: Not Reported Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

81 ESE FED USGS USGS40000152565

1/2 - 1 Mile Lower

Organization ID: USGS-CA

USGS California Water Science Center Organization Name: Monitor Location: 007N004W06R001S Type: Well Description: Not Reported HUC: 18090208 Drainage Area: Not Reported Not Reported **Drainage Area Units:** Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported

Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported

Construction Date: 1947 Well Depth: 65

Well Depth Units: ft Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: 2 Level reading date: 1958-06-11 Feet below surface: 44.06 Feet to sea level: Not Reported

Note: Not Reported

Level reading date: 1947-11-21 Feet below surface: 35

Feet to sea level: Not Reported Note: Not Reported

R82
ESE FED USGS USGS40000152500

1/2 - 1 Mile Lower

Organization ID: USGS-CA

Organization Name: USGS California Water Science Center Monitor Location: 007N004W06R003S Well Type: Not Reported HUC: Description: 18090208 Drainage Area: Not Reported **Drainage Area Units:** Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported

Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported

Construction Date: 1954 Well Depth: 66

Well Depth Units: ft Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: 1 Level reading date: 1958-06-11 Feet below surface: 50 Feet to sea level: Not Reported

Feet below surface: 50 Feet to sea level: Note: Not Reported

83 CA WELLS CADWR8000012189

1/2 - 1 Mile Lower

 State Well #:
 07N04W06A001S
 Station ID:
 5441

 Well Name:
 Not Reported
 Well Use:
 Unknown

 Well Type:
 Unknown
 Well Depth:
 0

Basin Name: Upper Mojave River Valley Well Completion Rpt #: Not Reported

84 CA WELLS CADWR8000011973 1/2 - 1 Mile

1/2 - 1 Mil Higher

 State Well #:
 07N04W07A001S
 Station ID:
 6000

 Well Name:
 Not Reported
 Well Use:
 Unknown

Well Type: Unknown Well Depth: 0

Basin Name: Upper Mojave River Valley Well Completion Rpt #: Not Reported

T85
SSE
CA WELLS CADWR8000011943
1/2 - 1 Mile

Lower

 State Well #:
 07N04W07G002S
 Station ID:
 6005

 Well Name:
 Not Reported
 Well Use:
 Unknown

 Well Type:
 Unknown
 Well Depth:
 0

Basin Name: Upper Mojave River Valley Well Completion Rpt #: Not Reported

86 ENE FED USGS USGS40000152886 1/2 - 1 Mile

Lower

Organization ID: USGS-CA

Organization Name: USGS California Water Science Center

Monitor Location: 007N004W06A001S Well Type: Description: Not Reported HUC: 18090208 Drainage Area Units: Drainage Area: Not Reported Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported

Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported Construction Date: Not Reported Well Depth: Not Reported Well Depth Units: Not Reported Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: 1 Level reading date: 1958-06-05 Feet below surface: Not Reported Feet to sea level: Not Reported

Note: The site was being pumped.

87 ESE FED USGS USGS40000152405

1/2 - 1 Mile Higher

Organization ID: USGS-CA

Organization Name: USGS California Water Science Center Monitor Location: 007N004W07A001S Well Type: Not Reported HUC: 18090208 Description: Drainage Area: Not Reported **Drainage Area Units:** Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported

Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported Construction Date: Not Reported Well Depth: Not Reported Well Depth Units: Not Reported Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: 1 Level reading date: 1958-06-04 Feet below surface: 41.76 Feet to sea level: Not Reported

Note: Not Reported

T88
SSE FED USGS USGS40000152327

1/2 - 1 Mile Lower

Organization ID: USGS-CA

Organization Name: USGS California Water Science Center Monitor Location: 007N004W07G001S Well Type: Description: Not Reported HUC: 18090208 Drainage Area: Not Reported **Drainage Area Units:** Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported

Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported Construction Date: Not Reported Well Depth: Not Reported Well Depth Units: Not Reported Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

T89
SSE
FED USGS USGS40000152328
1/2 - 1 Mile

Lower

Organization ID: USGS-CA

USGS California Water Science Center Organization Name: Monitor Location: 007N004W07G002S Well Type: Description: Not Reported HUC: 18090208 Drainage Area: Not Reported **Drainage Area Units:** Not Reported Contrib Drainage Area: Contrib Drainage Area Unts: Not Reported Not Reported

Aquifer: Basin and Range basin-fill aquifers

Formation Type: Not Reported Aquifer Type: Not Reported

Construction Date: Not Reported Well Depth: 73.5

Well Depth Units: ft Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: 1 Level reading date: 1958-06-11 Feet below surface: 15.79 Feet to sea level: Not Reported

Note: Not Reported

90 NE CA WELLS 8248

NE 1/2 - 1 Mile Lower

Seq: 8248 Prim sta c: 08N/04W-31P01 S

 Frds no:
 3610112001
 County:
 36

 District:
 13
 User id:
 TAN

 System no:
 3610112
 Water type:
 G

Source nam: WELL 01 Station ty: WELL/AMBNT/MUN/INTAKE/SUPPLY

 Latitude:
 344400.0
 Longitude:
 1172000.0

 Precision:
 8
 Status:
 AR

Comment 1: Not Reported Comment 2: Not Reported Comment 4: Not Reported

Comment 5: Not Reported Comment 6: Not Reported Comment 7: Not Reported

System no: 3610112 System nam: Sbdno County Serv. Area 70c

Hqname: SAN BERNARDINO CSA 70-C Address: P.O. BOX 1658

City: VICTORVILLE State: CA

Zip: 92393 Zip ext: Not Reported

Pop serv: 5433 Connection: 1839
Area serve: HELENDALE, CSA 70C

TC6174843.2s Page A-48

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
92342	4	0

Federal EPA Radon Zone for SAN BERNARDINO 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 SAN BERNARDINO COUNTY, CA

Number of sites tested: 18

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor Living Area - 2nd Floor	0.678 pCi/L Not Reported	100% Not Reported	0% Not Reported	0% Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory Source: Department of Fish and Wildlife

Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

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: Dept of Conservation, Geologic Energy Management Division

Telephone: 916-323-1779

Oil and Gas well locations in the state.

California Earthquake Fault Lines

Source: California Division of Mines and Geology

The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon

Source: Department of Public Health

Telephone: 916-210-8558 Radon Database for California

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.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

EPA Radon Zones Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor

radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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